

REPORT ON THE HEALTH

OF

County Borough of Stockport

FOR THE

YEAR 1903,

BY

Meredith Young, M.D.,

MAST. SURG., BACH. MED., D.P.H. (LOND.), D.S.Sc. (VICT.),

MEDICAL OFFICER OF HEALTH,

AND

**MEDICAL SUPERINTENDENT OF THE CORPORATION ISOLATION
HOSPITALS.**



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Year 1903.

EXTRACT FROM THE ORDER OF THE LOCAL GOVERNMENT

BOARD, 23RD MARCH, 1891.

RELATING TO THE DUTIES OF MEDICAL OFFICERS OF HEALTH.

(14) He shall also make an annual report to the Sanitary Authority, up to the end of December in each year, comprising a summary of the action taken, or which he has advised the Sanitary Authority to take, during the year for preventing the spread of disease, and an account of the sanitary state of his district generally at the end of the year. The report shall also contain an account of the inquiries which he has made as to conditions injurious to health existing in the district, and of the proceedings in which he has taken part or advised under any statute, so far as such proceedings relate to those conditions ; and also on account of the supervision exercised by him, or on his advice, for sanitary purposes over places and houses that the Sanitary Authority have power to regulate, with the nature and results of any proceedings, which may have been so required and taken in respect of the same during the year. The report shall also record the action taken by him, or on his advice, during the year, in regard to offensive trades, to dairies, cow-sheds, and milk shops, and to factories and workshops. The report shall also contain tabular statements (on forms to be supplied by us, or to the like effect), of the sickness and mortality within the district, classified according to diseases, ages, and localities.

Provided that, if the Medical Officer of Health shall cease to hold office before the thirty-first day of December, in any year, he shall make the like report for so much of the year as shall have expired when he ceases to hold office.

SANITARY COMMITTEE, 1903.

Chairman—COUNCILLOR THOMAS ELLIS.

Vice-Chairman—COUNCILLOR JAMES LOMAS.

THE MAYOR

(ALDERMAN W. LISTER).

ALDERMAN R. REDFERN; COUNCILLORS T. ALLCOCK, BALL, BARNETT,
BREWSTER, BROADHURST, R. JOHNSON, LOVE, MASSEY, POTTER,
SMEEETH, STEPHENSON, WILKINSON, AND W. WOOD.

Monday—Fixed Meetings.

January	5	March	30	June	22	September	14
„	19	April	13	July	6	„	28
February	2	„	27	„	20	October	12
„	16	May	11	August	3	„	26
March	2	„	25	„	17	November	23
„	16	June	8	„	31	December	7
December 21.							

AT 4 O'CLOCK P.M.

HOSPITAL SUB-COMMITTEE.

Chairman—COUNCILLOR ELLIS.

ALDERMAN R. REDFERN; COUNCILLORS T. ALLCOCK, BARNETT, BREWSTER,
JAMES LOMAS, POTTER, SMEETH, WILKINSON, AND W. WOOD.

Meetings—2-30 p.m., Fourth Monday in each Month.

SANITARY STAFF.

Food Inspector	W. BUTLER.*
Factory and Workshop Inspector	C. R. BILLINGHAM.
Drainage and Plumbing Inspector... ..	J. ASHTON.*
Female Sanitary Inspectors	<div> Miss E. M. HITCHMOUGH* (resigned July, 1903). Mrs. M. E. FORSTER.* Miss K. M. JONES.* </div>

DISTRICT INSPECTORS.

R. G. CHILD.*
W. ETCHELLS.*
G. PILKINGTON.*
F. H. WILLIAMS.*

Ambulance Attendant	G. WEBB.
Disinfector	J. RAYNER.

CLERKS.

H. BAILEY.
G. W. YATES.

* Those marked with an asterisk have obtained the Certificate of the Sanitary Institute.

Introduction.

To the Worshipful the Mayor and the Aldermen and
Councillors of the County Borough of Stockport.

MR. MAYOR AND GENTLEMEN,—

I have the honour to submit herewith my Fourth Annual Report on the health of your Borough.

In doing so I would draw your attention to a few of its outstanding features.

The death-rate shows an almost imperceptible increase, due in part to the greater prevalence of zymotic disease. Compensation is afforded, however, by a birth-rate which is better than the average of many past years. The other statistical factors show but little departure from the ordinary average.

Scarlet fever has continued its ravages almost unabated in spite of the adoption of all the precautionary measures practicable, but other infectious diseases have given less trouble than in previous years.

The routine work of the department has proceeded steadily and smoothly, as a reference to the skeleton outline of the various matters which come within its purview will show.

An outbreak of smallpox, which prevails at the time of writing this report, and which is taxing the whole of the energies of the department, has rendered it imperative to curtail the report in some measure, but it is trusted that none of the essential features are wanting.

I would commend to the careful consideration of your Council the various recommendations which it is my duty as your sanitary adviser to append to this report. In particular I would draw your attention to the urgent need for further isolation hospital provision.

I desire briefly, but none the less sincerely, to record my thanks to your Council and to my Committee for the careful and courteous consideration invariably accorded to my various recommendations and suggestions ; to the Chairman of the Sanitary Committee (Councillor T. Ellis) for the keen and unflagging interest manifested in the work of the department ; to the medical men in the town for hearty co-operation in all preventive measures ; to my brother officials for much readily accorded assistance ; and last but not least to the staff of the Department and the Hospitals for work willingly, thoroughly, intelligently, and loyally performed.

I am, Mr. Mayor and Gentlemen,

Your obedient servant,

MEREDITH YOUNG,

Medical Officer of Health.

Public Health Office,

Stockport,

July 17th, 1904.

PART I.

Statistical.

County Borough of Stockport.

1903.

STATISTICAL MEMORANDA.

Estimated Population, Mid-year, 1902	...	95,709
Area in Acres	... ..	5,485
Birth Rate per 1,000	... ..	29·25
General Death Rate per 1,000	... ..	20·08
Deaths of Infants under One year per 1,000		
Births...	... ..	183·9
Death Rate from Seven Principal Zymotic		
Diseases	... ..	2·53
Death Rate from Phthisis (Pulmonary		
Consumption)	... ..	1·64
Death Rate from all other Tubercular		
Diseases	... ..	0·77

Topography.

THE rivers Goyt and Tame unite at Tiviot Dale to form the river Mersey, and the Borough is situated on both the Lancashire and Cheshire sides of this river.

GEOLGY.—The solid rocks of the district are Permian Sandstone, Permian Marl, and Pebble Beds, with Coal Measures underlying glacial drift. The Heaton Norris portion of the Borough largely consists of sand and gravel overlying boulder clay, with pebble beds of the new red sandstone subjacent. Portwood, between the rivers Tame and Goyt, consists of a considerable depth of alluvium overlying the solid Permian Sandstone. The remainder of the district may perhaps be roughly divided into two halves by a line passing from the junction of Lancashire Hill and Sandy Lane to the junction of Cherry Tree Lane and Wellington Road South. The portion of the Borough lying to the east of this line has for solid rock mainly Permian Sandstone, whilst that lying to the west of it has Trias Sandstone for foundation. Forming as it were the boundary line between these two geological formations is a layer of Permian Marl, which extends in a strip on an average 1-6th of a mile in width between the two points named. Other strips of the same formation, though of slightly less width, run parallel with the above through various portions of the Borough (See Annual Report for 1900, page 7).

Area, Population, Inhabited Houses, &c.

The area of the Borough is 5,485 acres. Prior to extension in 1901 the area was only 2,200 acres, so that by the Borough Extension scheme it was considerably more than doubled.

The population of the extended Borough estimated at the census of 1901 was 92,832 persons, of which 43,268 were males, and 49,564 females, there being thus rather more than 114 females to every 100 males in the Borough.

At the same census the number of inhabited houses in the Borough was 21,063, there being at the same time 93 houses in course of construction, and 1,952 uninhabited.

The population at the various census enumerations from 1831 onwards, together with the estimated population for intercensal periods, is given in the following table. From this it may be seen that the Borough is steadily increasing in numerical strength, a fact which probably also implies that industry and general prosperity are also on the increase. It will be noted that the increase per cent. of the population during 1903 is materially greater than during any of the previous 11 years, a fact which would appear to have resulted from the extension of the Borough giving room for legitimate expansion.

Growth of Stockport.

Year	Inhabited Houses.	Houses Vacant. Building.		Population	Total Increase.	Total Decrease.	Increase per cent.	Decrease per cent
1831	...	...	...	43000	...	...	...	...
1841	8814	†1157	..	†50495	7495	...	17.43	...
1851	10568	...	...	†53835	3340	...	6.61	...
1861	11298	..	...	†54682	847	...	1.57	..
1871	...	...	...	†53001	...	1681	...	3.07
1881	13007	*1558	74	†59553	6552	...	12.36	...
1891	15573	†1216	100	†70263	10710	...	17.93	...
1892	..	...	...	71000	737	..	1.04	...
1893	16269	*870	170	71930	930	...	1.309	...
1894	16397	*804	150	72770	840	...	1.16	...
1895	16859	*876	100	73620	850	...	1.16	...
1896	17190	*890	120	74480	860	...	1.16	...
1897	17693	*613	197	75350	870	...	1.16	...
1898	17888	*561	...	76220	870	...	1.15	...
1899	18148	*600	197	77100	880	...	1.15	...
1900	18320	*697	220	78000	900	...	1.16	...
1901	†17982	*753 †	†71	†78897	897	...	1.15	...
1902	...	...	...	94422	15525	...	†19.67	...
1903	...	...	...	95709	1287	...	1.36	...

† Census Return.

* Not including lock-up shops, factories, and warehouses unoccupied at night,
which number 900 to 1000 at the present time.

† Borough Extension.

According to the **1891** census the total tenements in Stockport were 18,090. These tenements contained the following number of rooms :---

One room only	75 tenements.
Two rooms.....	1,619 „
Three rooms	431 „
Four rooms	8,777 „

Total tenements with less than 5 rooms ... 10,902

Ward Populations.

In the different Wards of the Borough the populations, acreage, etc., are as given in the following table:—

Ward.	Acre- age.	Estim- ated Popu- lation	Per- sons per Acre.	Ward.	Acre- age.	Estim- ated Popu- lation.	Per- sons per Acre.
Lancashire Hill	145	5103	35·19	Edgeley	331	6975	21·07
Heaton Lane ...	234	6332	27·06	Shaw Heath . .	392	7735	19·73
Old Road	114	5976	52·42	St. Thomas' ...	53	5618	106·0
Portwood	324	7377	22·76	Hemps'w Lane	146	5200	35·61
St. Mary's	91	3750	41·22	Cale Green ...	145	6647	45·84
Vernon	427	6026	14·11	Heaviley	1115	6692	6·0
Spring Bank ...	81	5002	61·75	Reddish North	786	5210	6·62
Hollywood	346	8300	23·98	Reddish South	755	3766	4·98

The Borough Surveyor kindly informs me that the number of **new houses built** in each ward during 1903 is as follows:—

Name of Ward.	Number of Houses.
Lancashire Hill.....	9
Heaton Lane.....	7
Old Road	3
Portwood	55
St. Mary's	nil.
Vernon	29
Spring Bank	nil.
Hollywood	31
Edgeley	26
Shaw Heath	76
St. Thomas'	nil.
Hempshaw Lane	40

Name of Ward.	Number of Houses.
Cale Green.....	9
Heaviley	50
North Reddish	54
South Reddish	11
Total	400

Marriages.

The number of Marriages solemnised during 1903 was 711, or 97 less than in 1902, the marriage rate per 1,000 persons living being 14·8.

Year.	Number of Marriages.	Rate per 1000 Living.	Rate for England and Wales.
1893	486	13·5	14·7
1894	615	16·9	15·1
1895	680	18·4	15·0
1896	585	15·7	15·8
1897	689	18 2	16·0
1898	706	18·5	16·3
1899	754	19·8	16·5
1900	753	19·3	16·0
1901	687	17·4	15·9
1902	808	17·1	15·8
1903	711	14·8	...

Births.

The births registered during the year have numbered 2,800, 1,358 of these being males, and 1,442 females. The birth-rate calculated per thousand of the population per annum is 29·25. This figure shows a distinct increase on the rate recorded for 1902, and is above the rate for England and Wales as a whole, which is 28·4, though slightly below the rate recorded for the 76 great towns of England and Wales, which is 29·7.

As in many previous years the birth-rate was highest in Hollywood Ward (34.93), and St. Thomas' Ward (34.53), whilst it was lowest in Cale Green Ward (19.71).

The birth-rate in Stockport during the past 21 years is shown in the following table :—

1883	... . . . .	34.9	1894	.....	31.68
1884	.. . . .	35.4	1895	.....	33.36
1885	.....	33.6	1896	.....	32.06
1886	.....	35.5	1897	.....	32.82
1887	.....	35.3	1898	.....	31.23
1888	.....	33.4	1899	.....	30.28
1889	.....	34.1	1900	.....	29.44
1890	.....	32.8	1901	.....	27.70
1891	.....	33.3	1902	.....	27.59
1892	.....	32.64	1903	.....	29.25
1893	.....	32.54			

Illegitimate Births.—Of these 105 have been registered during the year, a number equal to 3.75 per cent. of the total births registered, though this is a fallacious method of stating the proportion.

Deaths.

The deaths registered during the year have numbered 1,781, viz., 884 males and 897 females. In arriving at these figures 51 deaths of non-residents registered in public institutions in the district have been excluded, and 26 deaths of residents registered in public institutions outside the district have been included. The nett corrected death-rate per thousand of the estimated population is therefore 20.08. It is to be noted that this death rate is one which has been artificially increased by multiplication by a factor (1.0794) supplied by the Registrar-General, the correction being applied so as to render the death-rates in Stockport more comparable with those occurring in other towns in the country. It is well known to all persons that at certain age-periods of life death occurs with less frequency than at other age-periods. For example at ages under 5 years and over 55 years the rate at which persons die is a greater one than at all other ages; hence in a town which has a large population of persons under 5 years of age and over 55 years of age there will of necessity be a higher death-rate than in a town which has a small number of persons in its population at ages under 5 and over 55, but a large number of persons at ages between 5 and 55. In the same way, at nearly all ages, the death-rate in females is lower than that in males, and consequently a district having an excessive number of females in its population will of necessity have a lower death-rate than a district having an excess of males in the population. The Registrar-General, by means of a somewhat involved calculation, has devised what is termed a "factor for correction," which factor when applied to what might be called the normal or ordinary death-rate of the town, will increase it or decrease it so as to bring it into a figure which may fairly be compared with the figures for other towns and other districts in the country. In many of the previous years it is believed that this factor for correction has not been available, and therefore the death-rate has probably appeared more favourable than it

should have done. But for the application of this factor the death-rate of Stockport for 1903 would have been 18.608. However, as it stands at present the corrected death-rate for the Borough is only slightly higher than those of 1901 and 1902, whilst it is materially lower than any death-rate recorded during the past twenty years except that for 1894, which is an admittedly exceptional one.

In the following table is shown the deaths which occurred within the district of persons not belonging thereto :—

Where from.	DIED.			Where from.	DIED.		
	Work-house.	In-firmary.	Else-where.		Work-house.	In-firmary.	Else-where.
Hyde	9	...	...	Mellor	1	...	...
Manchester ...	7	1	...	Heaton Chapel	1	...	...
Hazel Grove...	5	1	...	Bredbury ...	1	...	...
Cheadle	2	2	...	Hayfield .....	...	2	...
Cheadle Hulme	2	...	...	Northenden ...	...	2	...
Gorton	2	...	...	Buxton .....	...	1	...
Marple	2	...	...	Lytham.....	...	1	...
Oldham.....	1	...	...	Longsight.....	...	1	...
Cockermouth	1	...	...	Heaton Mersey	...	1	...
Accrington ...	1	...	...	New Mills.....	...	1	...
Stalybridge ...	1	...	...	Wilmslow ...	...	1	...
				Macclesfield...	...	1	...

Totals :—In Workhouse, 36 ; in Infirmary, 15 ; elsewhere, 0.

DEATHS IN INSTITUTIONS.

In the various Public Institutions in Stockport, 206 persons belonging to the town have died during the year. These deaths have been distributed to the Wards in which the persons were normally resident as shewn in the following table :—

Ward.	Died in			Ward.	Died in		
	Work-house.	In-firmary.	Isolation Hospit'ls		Work-house.	In-firmary.	Isolation Hospit'ls
Lancashire Hill	5	1	1	Edgeley	2	2	1
Heaton Lane ..	9	3	1	Shaw Heath ...	24	4	4
Old Road	6	1	2	St. Thomas ...	20	1	2
Portwood	10	4	1	Hempshaw Lane	9	1	1
St. Mary's.....	22	...	1	Cale Green	5	...	...
Vernon	9	...	1	Heaviley	4	...	...
Spring Bank...	16	4	5	Reddish North..	2	...	...
Hollywood ...	8	3	2	Reddish South..	8	...	...

Totals :—In Workhouse, 159 ; in Infirmary, 24 ; in Isolation Hospitals, 22.

Table I.—LOCAL GOVERNMENT BOARD RETURN.

Vital Statistics of Whole District during 1903 and previous years.—Name of District, STOCKPORT.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.					Deaths of Non- residents regis- tered in Public Institu- tions in the District. 10	Deaths of Residents regis- tered in Public Institu- tions beyond the District. 11	NETT DEATHS AT ALL AGES BELONGING TO THE DISTRICT.	
		Number	Rate.*	Under 1 Year of Age.		At all Ages.					Number.	Rate.*
				Number. 5	Rate per 1000 Births registered. 6	Number. 7	Rate.* 8					
1	2	3	4	5	6	7	8	9	10	11	12	13
1893	71,930	2341	32.54	522	222	1810	25.16	233	65	...	1745	24.25
1894	72,770	2306	31.68	442	192	1434	19.70	228	51	...	1383	19.00
1895	73,620	2456	33.36	568	231	1941	26.36	289	71	...	1870	25.40
1896	74,480	2388	32.06	452	189	1648	22.12	245	61	...	1587	21.30
1897	75,350	2473	32.82	531	214	1780	23.62	241	55	...	1725	22.89
1898	76,220	2381	31.23	551	231	1699	22.29	226	52	...	1647	21.60
1899	77,100	2335	30.28	518	221	1738	22.54	278	67	...	1671	21.67
1900	78,000	2297	29.44	467	203	1823	23.37	280	64	7	1766	22.64
1901	78,897	2186	27.70	431	197	1617	20.49	293	72	4	1549	19.63
1902	94,422	2606	27.59	477	183	1856	19.65	325	59	35	1832	19.40
Averages for years 1893—1902	77,278	2376	30.75	495	208	1734	22.43	263	61	...	1677	21.70
1903	95,709	2800	29.25	515	183.9	1806	20.36	257	51	26	1781	20.08

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

RECORDED AND CORRECTED DEATH-RATES PER 1,000
PERSONS LIVING IN CERTAIN OF THE 76
GREAT TOWNS IN 1903.

Taken from Registrar General's Annual Summary, 1903.

Towns in the order of their Corrected Death-rates.	Standard Death- rate.*	Factor for Correc- tion for Sex and Age Dis- tribution. †	Recorded Death- rate 1903.	Corr- ected Death- rate. 1903.‡	Com- parative Mor- tality Figure 1903.§
Tottenham	16·87	1·0794	13·03	14·06	912
Derby	16·89	1·0782	13·59	14·65	951
Smethwick	16·65	1·0937	13·48	14·74	957
Cardift	16·74	1·0878	13·99	15 22	988
Halifax	16·78	1·0852	15 02	16·30	1058
Newport, Mon.	16·83	1·0820	15·71	17·00	1103
Huddersfield	16·95	1 0743	16·73	17·97	1166
Birmingham	16·92	1 0762	17·78	19·13	1241
St. Helens	16·80	1·0839	17·71	19·20	1246
Stockport	16·87	1·0794	18·45	19·91	1292
Swansea	16·97	1·0731	18·59	19·95	1295
Sheffield	16·89	1·0782	18·62	20 08	1303
Warrington	16·87	1 0794	18·67	20·15	1308
Hanley	16·69	1·0911	18·69	20·39	1323
Newcastle-on-Tyne	16·88	1·0788	19 22	20·73	1345

* The standard death-rate signifies the rate at all ages calculated on the hypothesis that the rates for each sex at each of twelve age-periods in each

town were the same as in England and Wales during the ten years 1891-1900, the rate at all ages in England and Wales during that period having been 18·21 per 1,000.

† The factor for correction is obtained by dividing the standard death-rate in England and Wales by the standard death-rate in each town, and is the figure by which the recorded death-rate should be multiplied in order to correct for variations of sex and age distribution.

|| The corrected death-rate is the recorded death-rate multiplied by the factor for correction.

§ The comparative mortality figure represents the corrected death rate in each town compared with the recorded death-rate at all ages in England and Wales in 1903, taken as 1,000.

In table 1, Local Government Board return, are given the principal vital statistics of Stockport for the ten years 1893-1902 inclusive, together with the corresponding figures for 1903. It may be seen from that table that the birth-rate is only slightly under the average for the past ten years, whilst the infant mortality shows a drop from an average of 208 per thousand registered births during the decade alluded to to 183·9 in 1903. The nett or corrected death-rate also shows a welcome fall, being 20·08, as compared with an average rate of 21·70 for the decade 1893 to 1902.

Uncertified Deaths and Inquests.

During 1903 there were 111 deaths registered in which the cause of death was not certified by any medical practitioner. In 107 of these cases an inquest was held, and the verdicts found by the coroner's juries may be summarised as follows :—

1. Natural Causes.		2. By Accident or Negligence.	
"Natural causes"	5	In vehicular traffic.....	2
Scarlet fever	1	On railways	2
Senile decay	1	Burns and scalds	9
Convulsions	18	Falls from a height.....	5
Heart failure (syncope).....	7	Fractures	5
Heart disease.....	2	Injuries to head and neck	3
Cerebral hæmorrhage	2	Injuries, shock to system	1
Apoplexy.....	1	Injuries to brain	1
Inanition	2	Other injuries	2
Phthisis	1	Drowning	2
Bronchitis	5	Suifocation	2
Broncho Pneumonia	1	Alcoholism	3
Congestion of lungs	1	Effects of drinking bichromate of potash	1
Meningitis	1	3. Suicides.	
Acute undeveloped fever	1	By poison.....	4
Intussusception of bowel	1	By hanging and strangulation ...	6
Suifocation caused by epileptic fit	1	Drowning	4
Erysipelas caused by a fall	1	Cut or stab	2
Broncho pneumonia accelerated by a dislocated hip through a fall	1		

I should be glad if your Council would at some early date consider the advisability of providing a **public mortuary**. In previous Annual Reports I have drawn attention to this, and I cannot refrain from once more pointing out the danger which arises to the public at large, and more particularly to the licensed victuallers by the use of public-houses for bodies found dead on the road or in the river, etc. The expenditure of a comparatively small sum would at once abolish this danger, and your authority has already power under section 141 of the Public Health Act, 1875, to provide and fit up a proper place for the reception of dead bodies before interment, to make bye-laws with respect to its management, and to charge for its use.

A more detailed summary of the verdicts returned by the coroner's juries is given in the accompanying table :—

Comparative Mortality during last Decennium.

Herein are set out the principal causes of death in the Borough for the past ten years :—

CAUSE OF DEATH.	Number of Deaths.										
	1903	1902	1901	1900	1899	1898	1897	1896	1895	1894	1893
Seven Chief											
Zymotics ...	224	185	240	179	354	327	386	231	336	132	366
Smallpox ...	5	7	...	...	...	...	...	...	...	2	2
Scarlet Fever	27	23	25	5	10	11	19	19	6	6	11
Diphtheria ...	9	11	17	15	5	3	4	14	27	16	32
“ Fevers ” —											
T y p h o i d											
and Con-											
tinued	13	13	14	17	9	21	20	22	20	8	49
Measles	41	36	51	24	93	55	73	17	84	1	37
Whooping											
Cough	49	33	13	41	31	18	38	34	32	3	33
Diarrhoea ...	80	62	120	77	206	219	232	125	167	96	202
Influenza	9	9	12	23	36	10	19	9	16	8	3
Lung Diseases											
(i n c l u d i n g											
Phthisis)	497	529	437	539	488	492	522	542	629	457	526
Heart Disease ...	153	167	126	126	119	123	123	126	140	112	112
Injury	30	63	21	39	50	49	46	28	32	33	49

An alteration has been made in the classification of deaths from epidemic or zymotic diarrhoea and kindred diseases which affects the figures of this year and that immediately preceding, so that it would be perhaps unfair to draw conclusions from them.

In the accompanying diagram the deaths from various diseases and groups are plotted out to scale with a view to showing at a glance their relative magnitude. The actual number of deaths is as below. :—

STOCKPORT, 1903.

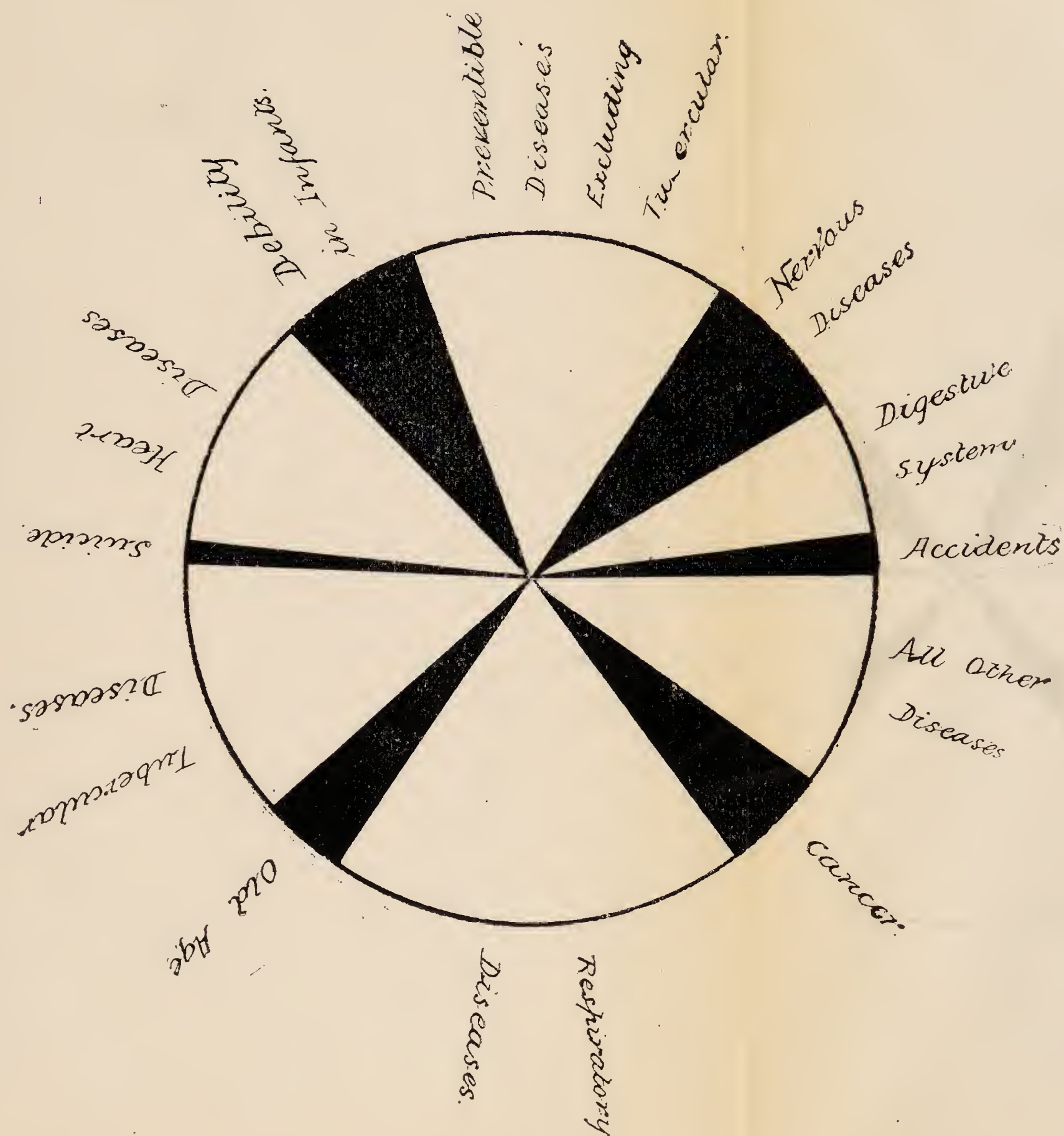


Diagram shewing chief causes of Death.

STOCKPORT

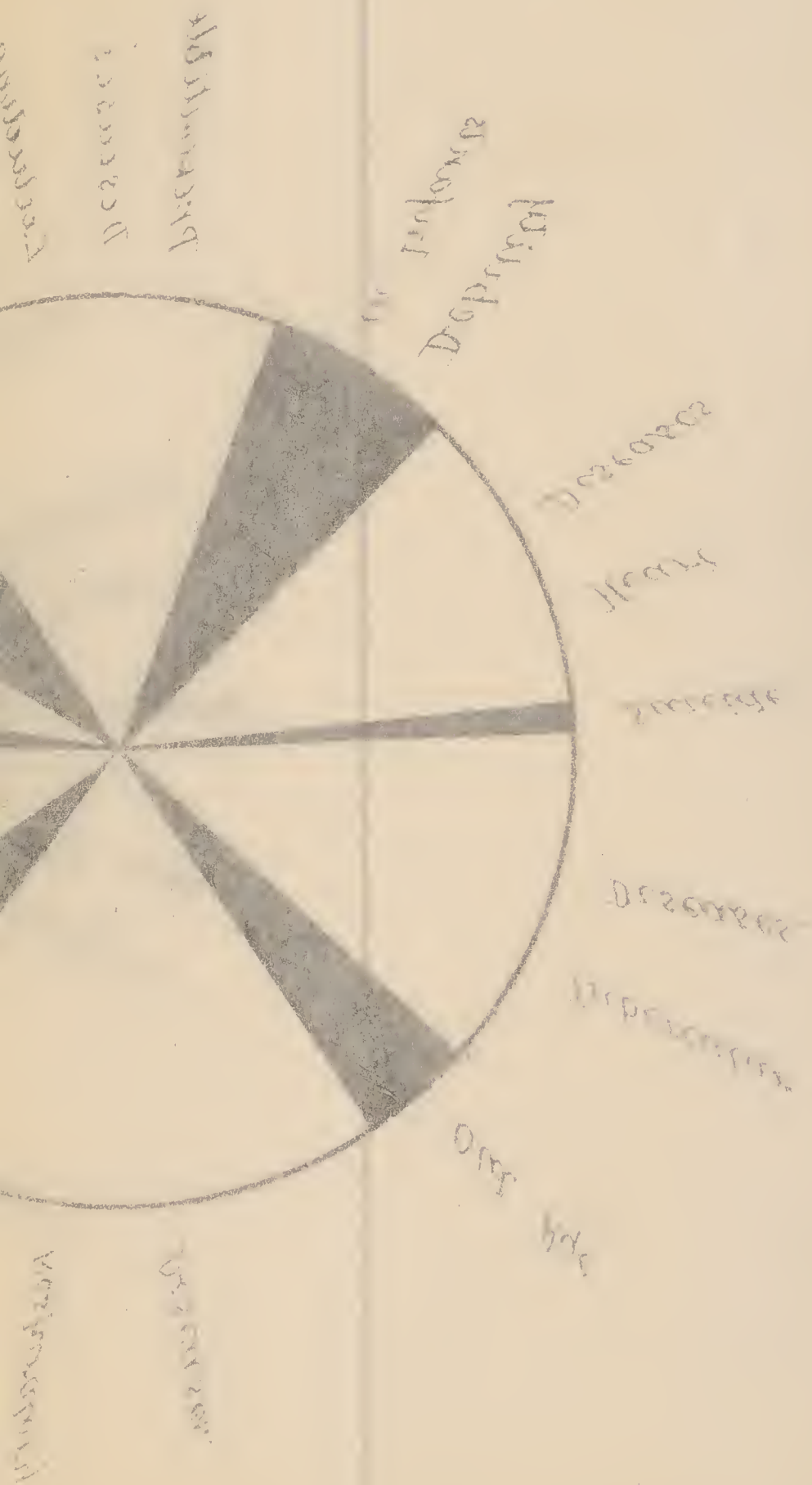


Diagram shewing chief

2001 ANNUAL REPORT OF THE BOROUGH

	Deaths	Nett Death rate.	No. of deaths under 1 year of age	Infant mortality rate per 1000 births
1900	72	15.22	25	15.1
1901	25	21.307	33	17.1
1902	16	20.95	38	23.1
1903				
1904				
1905				
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SUMMARY OF THE VITAL AND MORTAL STATISTICS OF THE BOROUGH AND EACH OF ITS WARDS FOR THE YEAR 1903.

WARD.	Acreage.	Estima- ted Popula- tion.	Persons per acre.	No. of Births registered.	Birth rate.	Nett deaths	Nett Death rate.	No. of de'ths under 1 year of age	Infant mortal- ity rate per 1000 births.	No. of de'ths from 7 prin- cipal Zy- motic dis- eases	Zymotic Death rate per 1000.	Zymotic death rate per 1000 (exclud- ing Diarrhoea)	No. of de'ths from Diarrhoea.	Death rate from Diarrhoea per 1000.	No. of de'ths from Pthi- sis.	Death rate from Pthi- sis per 1000.	No. of de'ths from other Tubercu- lar dis- eases	Death rate from other Tubercu- lar dis- eases per 1000.	No. of de'ths from Other Lung Dis- eases.	Death rate from Other Lung Dis- eases per 1000.
LANCASHIRE HILL ...	145	5,103	35.19	M. 86 F. 80 166	32.52	72	15.22	25	150.6	5	1.04	0.42	3	0.62	7	1.47	4	0.84	17	3.59
HEATON LANE ...	234	6,332	27.06	89 95 184	29.058	125	21.307	33	179.3	20	3.108	1.87	9	1.53	6	1.02	7	1.19	26	4.43
OLD ROAD ...	114	5,976	52.42	74 86 160	26.77	116	20.95	38	237.5	15	2.69	1.44	7	1.26	6	1.08	3	0.54	25	4.51
PORTWOOD ...	324	7,377	22.76	92 111 203	27.51	148	21.65	38	187.1	12	1.75	1.02	5	0.73	12	1.75	12	1.75	35	5.11
ST. MARY'S ...	91	3,750	41.22	36 53 89	23.73	102	29.35	17	191.01	8	2.29	2.01	1	0.28	9	2.59	5	1.43	27	7.77
VERNON ...	427	6,026	14.11	93 107 200	33.18	115	20.59	38	190	13	2.32	1.608	4	0.71	16	2.86	3	0.53	17	3.04
SPRING BANK ...	81	5,002	61.75	69 78 147	29.38	129	27.83	40	272.1	29	6.25	4.96	6	1.29	13	2.80	4	0.86	24	5.17
HOLLYWOOD...	346	8,300	23.98	144 146 290	34.93	122	15.86	38	131.03	12	1.55	1.03	4	0.51	12	1.55	4	0.51	31	4.03
EDGELEY ...	331	6,975	21.07	103 92 195	27.95	95	14.70	27	138.4	11	1.701	1.23	3	0.46	6	0.92	1	0.15	19	2.94
SHAW HEATH ...	392	7,735	19.73	94 131 225	29.08	145	20.23	43	190.1	19	2.65	1.67	7	0.97	9	1.25	5	0.69	24	3.34
ST. THOMAS' ...	53	5,618	106.0	105 89 194	34.53	142	27.28	42	216.5	18	3.45	1.34	11	2.11	10	1.92	4	0.76	24	4.609
HEMPSHAW LANE ...	146	5,200	35.61	91 84 175	33.65	109	22.62	47	206.8	13	2.69	1.03	8	1.66	13	2.69	3	0.62	20	4.15
CALE GREEN ...	145	6,647	45.84	54 77 131	19.708	102	16.55	24	183.2	6	0.97	0.48	3	0.48	9	1.46	1	0.16	15	2.43
HEAVILEY ...	1115	6,692	6.0	87 78 165	24.65	105	16.93	27	163.6	17	2.74	2.09	4	0.64	6	0.96	3	0.48	19	3.06
REDDISH NORTH...	786	5,210	6.62	84 76 160	30.71	70	14.50	16	100.0	14	2.90	2.69	1	0.205	6	1.24	8	1.65	13	2.69
REDDISH SOUTH...	755	3,766	4.98	57 59 116	30.80	84	24.07	22	189.6	12	3.43	2.29	4	1.14	6	1.71	2	0.57	15	4.29
STOCKPORT BOROUGH	5485	95,709	17.44	1358 1442 2800	29.25	M 884 F 897 1781	20.08	515	183.9	224	2.52	1.62	80	0.90	146	1.64	69	0.77	351	3.95

* Deaths of Stockport residents in the Union Workhouse, Infirmary, and Isolation Hospital are here referred to the Wards in which they lived.

Deaths within the Borough of Non-residents from out-townships are excluded. (See following table.)

† The "Seven Principal Zymotic Diseases" are Smallpox, Measles, Scarlet Fever, Diphtheria and Membranous Croup, Whooping Cough, Fever (typhus, typhoid, and continued), and Diarrhoea.

‡ Registrar General's estimate.

	No. of Deaths.
Lung diseases (excluding Consumption)	351
Preventible Diseases (excluding Tubercular Diseases)	258
Phthisis and other Tubercular Diseases	215
Diseases of Circulatory System (Heart, &c.)	190
„ Nervous System	130
„ Digestive System.....	111
Debility and Wasting, etc., in Infants	110
Old age	96
Cancer	82
Accidents	30
Suicides	16
All other diseases	192

Mortality in the Different Wards.

1. The **Nett General Death-rate**, which averaged 20·08 in the Borough as a whole, was exceptionally high in St. Marys Ward (29·35), and also in Spring Bank and St. Thomas' Wards (27·83 and 27·28 respectively). The lowest death-rate of all was recorded in Reddish North Ward (14·50), though Edgeley Ward, with a rate of 14·70, ran it somewhat close. In the following wards the rate was higher than that of the Borough as a whole :—

Heaton Lane	21·31
Old Road.....	20·95
Portwood.....	21·65
Vernon	20·59
Shaw Heath	20·23
Hempshaw Lane	22·62
Reddish South	24·07

In the following wards the death-rate was below that of the town as a whole :—

Lancashire Hill	15·22
Hollywood	15·86
Cale Green	16·55
Heaviley	16·93

2. The **Zymotic Death-rate**, or death-rate from the seven principal preventible diseases, was 2·52 per thousand in the Borough as a whole, rising as high as 6·25 in Spring Bank Ward, a most exceptional rate, and falling as low as 0·97 in Cale Green Ward. The high rate in Spring Bank Ward was undoubtedly due to the prevalence of measles and whooping cough. The zymotic death-rates in the other wards may be classified as follows :—

Above the general average for the Borough :—

Heaton Lane	3·41
Old Road	2·69
Shaw Heath.....	2·65
St. Thomas'	3·45
Hempshaw Lane	2·69
Heaviley	2·74
Reddish North	2·90
Reddish South	3·43

Below the general average for the Borough :—

Lancashire Hill	1.04
Portwood	1.75
St. Mary's.....	2.29
Vernon	2.32
Hollywood	1.55
Edgeley	1.70

3. The **Death-rate from Diarrhoeal Diseases** was 0.90, a rate which was in excess of that for England and Wales generally (0.50), and slightly in excess of that for the 76 Great Towns of England and Wales (0.71). The rate reached a very high figure in St. Thomas' Ward, where it was 2.11 per thousand, whilst St. Mary's and Reddish North Wards exhibited very low figures (0.28 and 0.205 respectively). It is pleasing to note that Hollywood, Edgeley, and Shaw Heath Wards, where the birth-rate is usually above the average, and where, in consequence, there is a large number of infants amongst whom diarrhoea is particularly rife, show extremely satisfactory death-rate from this class of disease, the figures being respectively 0.51, 0.46, and 0.97 per thousand.

4. **Phthisis or Consumption of the Lungs** was responsible for 146 deaths in the Borough as a whole, these figures being equivalent to a rate of 1.64 per thousand of the population. In the following wards the rate was unusually high :—

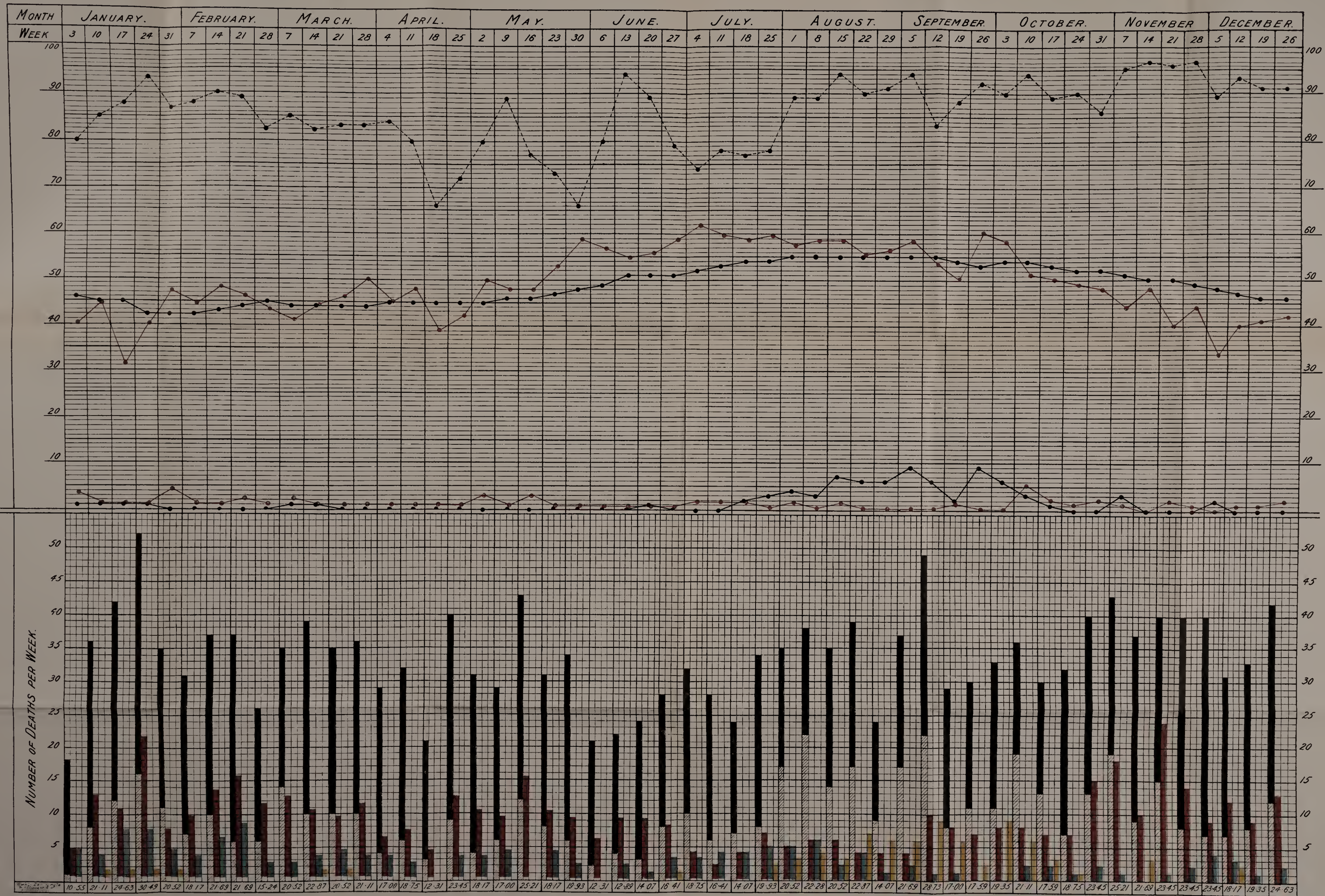
St. Mary's	2.59
Vernon	2.86
Spring Bank	2.80
Hempshaw Lane	2.69

Whilst in Heaviley and Edgeley Wards the rates were much below the average, viz., 0.92 and 0.96 per thousand respectively.

5. **Infantile Mortality.** Here again some rather striking departures from the average rate for the Borough, which was 183.9, are observable. In Spring Bank Ward a rate of 272.1 is to be noticed, and in Old Road Ward one of 237.5. The lowest infantile mortality is recorded in Reddish North Ward, where it was 100.0, whilst in Hollywood and Edgeley Wards the rates were also comparatively low, viz., 131.05 and 138.4 respectively. The rate of infant mortality in England and Wales as a whole during 1903 was 132 per thousand births, and in the 76 Great Towns 144.

6. **Density.** Some of the preceding figures are undoubtedly to be explained by the indirect influence of density of population on a given area, this density of population implying in many cases overcrowding, great facilities for the spread of infectious disease, smaller fresh air space, smaller houses, and smaller rooms with consequent greater atmospheric impurity, and in many cases the co-existence of poverty. The density of the Borough as a whole is 17.4 persons per acre, but the population is very unevenly distributed, as may be seen from the fact that in St. Thomas' Ward the density reaches the high figure of 106 persons per acre, and in Old Road Ward 52.4 persons per acre, whilst in Reddish South, Reddish North, and Heaviley Wards it falls as low as 4.98, 6.62, and 6.0 persons per acre, respectively. Taking a few of the figures for purposes of comparison, we find that in St. Thomas' Ward, with a density of 106 persons per acre, the birth-rate was at the rate of 34.53 per thousand of the population, a figure which implies the existence of a large population under one year of age, amongst whom the mortality is always

County Borough of Stockport, 1903.



DOTTED BLACK CURVE
denotes mean weekly percentage
humidity of atmosphere (100—
Saturation).

THE UPPER RED CURVE
denotes the mean weekly
temperature of the air.

THE UPPER BLACK CURVE
denotes the mean weekly
temperature of the earth
at a depth of 4 feet.

THE LOWER BLACK CURVE
denotes the weekly Deaths from
diarrhoea.

THE LOWER RED CURVE
denotes the weekly occurrences
of enteric and continued
fevers.

AVERAGE DEATH RATE
FOR YEAR 20'08
per Thousand.

Black Columns=Total deaths from all causes.
Shaded portion=Deaths of children under 1 year.

WEEKLY RECORD OF DEATHS.
Red Columns=Deaths from Respiratory Diseases.

Blue Columns=Deaths from Zymotic Diseases (excluding Diarrhoea).



TABLE II.—LOCAL GOVERNMENT BOARD RETURN.—NAME OF DISTRICT **STOCKPORT.**

NAMES OF LOCALITIES.	1.—LANCASHIRE HILL.				2.—HEATON LANE.				3.—OLD ROAD.				4.—PORTWOOD.				5.—ST. MARY'S.				6.—VERNON.				7.—SPRING BANK.				8.—HOLLYWOOD.			
YEAR.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
	<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>	<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>	<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>	<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>	<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>	<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>	<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>	<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>
1895 ...	4665	173	103	35	5695	165	165	58	5563	209	159	52	6091	260	184	60	3495	123	138	29	5401	149	117	50	4663	161	155	43	6282	205	141	45
1896 ...	4718	164	85	21	5762	186	138	35	5631	205	120	35	6163	249	183	68	3535	144	126	31	5470	186	117	31	4718	169	129	43	6356	194	125	35
1897 ...	4772	162	90	31	5829	190	142	45	5697	205	118	38	6236	226	168	62	3577	125	136	31	5536	202	122	49	4773	163	146	41	6430	236	134	35
1898 ..	4827	162	104	28	5896	180	173	56	5762	195	128	49	6309	205	191	69	3618	122	107	31	5602	158	107	46	4827	188	120	36	6504	220	122	41
1899 ...	4882	153	105	31	5964	198	132	40	5823	189	120	33	6381	212	135	49	3659	128	122	35	5669	177	110	43	4883	144	136	36	6579	245	175	66
1900 ...	4940	147	84	24	6033	152	144	32	5897	193	105	35	6455	190	168	53	3702	114	123	23	5735	187	133	42	4940	162	151	41	6655	225	143	33
1901 ...	4998	167	93	30	6102	150	144	42	5966	163	106	27	6528	191	144	49	3745	89	89	15	5801	175	116	36	4997	129	117	36	6731	209	140	42
1902 ...	5084	149	99	29	6309	189	158	41	5966	178	126	29	7200	212	157	56	3745	107	89	20	5933	175	116	33	4997	146	139	38	8199	256	150	32
Averages of years 1895 to 1902.	4860·7	159·6	95·4	28·6	5948·7	176·2	149·5	43·6	5789·4	192·1	122·7	37·2	6420·4	218·1	166·2	58·2	3634·5	119	116·2	26·9	5643·4	176·1	117·2	41·2	4849·7	157·7	136·6	39·2	6717	223·7	141·2	41·1
1903 ..	5103	166	72	25	6332	184	125	33	5976	160	116	38	7377	203	148	38	3750	89	102	17	6026	200	115	38	5002	147	129	40	8300	290	122	38

Deaths of residents occurring beyond the district are included in sub-columns *c* of this table, and those of non-residents registered in the district excluded. (See note on Table I. as to meaning of terms “resident” and “non-resident.”)

Deaths of residents occurring in public institutions are allotted to the respective localities, according to addresses of the deceased.

NOTE.—The populations throughout this table have been revised so as to bring them as far as possible into agreement with the recent Census enumeration.

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TABLE II.—LOCAL GOVERNMENT BOARD RETURN.—NAME OF DISTRICT **STOCKPORT.**

NAMES OF LOCALITIES.		9.—EDGELEY.				10.—SHAW HEATH.				11.—ST. THOMAS'S.				12.—HEMPSHAW LANE.				13.—CALE GREEN.				14.—HEAVILEY.				15.—REDDISH NORTH.				16.—REDDISH SOUTH.				WHOLE BOROUGH.			
YEAR.		Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.				
		a.	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.				
1895	...	5974	277	117	35	5554	125	163	35	5215	180	173	46	4630	165	110	45	6150	140	72	16	4237	124	73	19	..	...	...	...	...	...	...	...	73620	2456	1870	568
1896	...	6013	195	104	33	5618	156	98	22	5275	196	153	42	4683	134	78	29	6221	118	67	14	4287	92	64	13	..	...	...	...	...	...	...	...	74480	2388	1587	452
1897	...	6114	180	96	22	5684	190	147	49	5386	211	173	44	4736	134	110	44	6294	118	73	18	4336	122	70	22	...	...	...	...	...	...	...	75350	2473	1725	531	
1898	..	6185	202	97	34	5750	177	117	37	5397	189	147	50	4790	137	84	31	6368	138	77	19	4385	108	73	24	...	...	...	...	...	...	...	76220	2381	1647	551	
1899	...	6257	169	119	33	5817	158	122	44	5458	180	137	32	4843	155	107	40	6442	124	89	17	4435	103	62	19	...	...	...	...	...	...	...	77100	2335	1671	518	
1900	...	6329	221	94	31	5884	149	149	31	5523	155	158	41	4903	132	119	39	6516	146	104	15	4488	124	91	27	.	...	...	...	...	...	...	...	78000	2297	1766	467
1901	...	6401	180	107	27	5951	159	115	33	5587	173	139	37	4960	148	100	27	6590	120	79	13	4540	133	60	17	...	...	...	...	...	...	...	78897	2186	1549	431	
1902	...	6591	157	96	16	7511	192	152	34	5598	135	131	30	5072	148	99	29	6618	139	92	24	6531	154	89	15	5037	165	84	30	3731	104	55	21	94422	2606	1832	477
Ave ages of years 1895 to 1902.)		6274.2	198.7	103.7	25.9	5971.1	163.2	132.9	35.6	5423.6	177.4	151.4	40.2	4827.5	144.1	100.9	35.5	6399.9	136.4	81.6	17	4654.9	120	72.7	19.5	...	...	...	...	...	...	...	78511.1	2390.2	1705.9	499.4	
1903	..	6975	195	95	27	7735	225	145	43	5618	194	142	42	5200	175	109	47	6647	131	102	24	6692	165	105	27	5210	160	70	16	3766	116	84	22	95700	2800	1781	515

Deaths of residents occurring beyond the district are included in sub-columns *c* of this table, and those of non-residents registered in the district excluded. (See note on Table I. as to meaning of terms "resident" and "non-resident.")

Deaths of residents occurring in public institutions are allotted to the respective localities, according to addresses of the deceased.

NOTE. — The populations throughout this table have been revised so as to bring them as far as possible into agreement with the recent Census enumeration.

1900			1901			1902			1903			1904			1905			1906			1907			1908			1909			1910			1911			1912			1913			1914			1915			1916			1917			1918			1919			1920			1921			1922			1923			1924			1925			1926			1927			1928			1929			1930			1931			1932			1933			1934			1935			1936			1937			1938			1939			1940			1941			1942			1943			1944			1945			1946			1947			1948			1949			1950			1951			1952			1953			1954			1955			1956			1957			1958			1959			1960			1961			1962			1963			1964			1965			1966			1967			1968			1969			1970			1971			1972			1973			1974			1975			1976			1977			1978			1979			1980			1981			1982			1983			1984			1985			1986			1987			1988			1989			1990			1991			1992			1993			1994			1995			1996			1997			1998			1999			2000			2001			2002			2003			2004			2005			2006			2007			2008			2009			2010			2011			2012			2013			2014			2015			2016			2017			2018			2019			2020			2021			2022			2023			2024			2025			2026			2027			2028			2029			2030			2031			2032			2033			2034			2035			2036			2037			2038			2039			2040			2041			2042			2043			2044			2045			2046			2047			2048			2049			2050			2051			2052			2053			2054			2055			2056			2057			2058			2059			2060			2061			2062			2063			2064			2065			2066			2067			2068			2069			2070			2071			2072			2073			2074			2075			2076			2077			2078			2079			2080			2081			2082			2083			2084			2085			2086			2087			2088			2089			2090			2091			2092			2093			2094			2095			2096			2097			2098			2099			2100			2101			2102			2103			2104			2105			2106			2107			2108			2109			2110			2111			2112			2113			2114			2115			2116			2117			2118			2119			2120			2121			2122			2123			2124			2125			2126			2127			2128			2129			2130			2131			2132			2133			2134			2135			2136			2137			2138			2139			2140			2141			2142			2143			2144			2145			2146			2147			2148			2149			2150			2151			2152			2153			2154			2155			2156			2157			2158			2159			2160			2161			2162			2163			2164			2165			2166			2167			2168			2169			2170			2171			2172			2173			2174			2175			2176			2177			2178			2179			2180			2181			2182			2183			2184			2185			2186			2187			2188			2189			2190			2191			2192			2193			2194			2195			2196			2197			2198			2199			2200			2201			2202			2203			2204			2205			2206			2207			2208			2209			2210			2211			2212			2213			2214			2215			2216			2217			2218			2219			2220			2221			2222			2223			2224			2225			2226			2227			2228			2229			2230			2231			2232			2233			2234			2235			2236			2237			2238			2239			2240			2241			2242			2243			2244			2245			2246			2247			2248			2249			2250			2251			2252		
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high, and in this ward we find that there is a death-rate of 27·28, an infant mortality of 216·5, a zymotic rate of 3·45, a diarrhoea death-rate of 2·11, and a phthisis death-rate of 1·92, everyone of these figures being higher than those for the Borough as a whole, and very considerably in excess of what one might term the most favoured wards in the town. Again, in Spring Bank Ward, where the density is 61·75 persons per acre, we have again a fairly higher birth-rate 29·38, a high death-rate 27·83, an exceptionally high infant mortality 272, an excessive zymotic death-rate 6·25, and a high phthisis death-rate 2·8. Comparing these figures with one of the most favoured wards, for example Heaviley, we find there that the number of persons per acre is only 6 ; the birth-rate is a low one 24·65, the nett death-rate is one of the lowest (16·93), whilst the infant mortality, the diarrhoea death rate, and the phthisis death-rate are all below the average for the Borough generally, viz., 163·6, 0·64, and 0·96 respectively.

The remaining statistics for each ward in the Borough will be found in the accompanying table, whilst in table 2 (Local Government Board return) the vital statistics of the various wards for the past eight years are set out in accordance with the requirements of the Board.

INFECTIOUS DISEASE NOTIFICATION ACT.
CASES REPORTED DURING 1903.

Month.	Small-pox.	Scarlet Fever	Diphtheria	Membranous Croup	Typhoid Fever	Puerperal Fever	Erysipelas	Totals
January	27	69	7	1	4	1	5	114
February	6	79	2	...	1	1	4	93
March ...	3	55	4	...	1	...	5	68
April ...	1	44	2	...	...	1	3	51
May	5	76	1	...	4	1	5	92
June ...	3	53	1	...	...	...	4	61
July	2	34	...	...	4	1	5	46
August .	...	28	1	1	1	...	3	34
September	1	35	4	...	1	...	5	46
October ...	2	31	1	...	10	1	9	54
November	...	33	1	...	4	4	2	44
December	...	36	3	...	4	...	6	49
Totals...	50	573	27	2	34	10	56	752

Infectious Diseases Notification Act.

The number of notifications received from medical practitioners under the provisions of the above Act has again reached a high figure, viz., 752. At the beginning of the year smallpox was still prevalent, and the outbreak of scarlet fever, from which the town had suffered severely during the previous year, was maintained. It was only about the month of July that the figures reached what might be termed the normal point for the town. Whilst the excessive prevalence of scarlet fever is a matter for regret, and a matter which it is difficult to explain except on the hypothesis that we have been going through what is termed a wave of prevalence of this disease, there are other figures upon which your Council may be undoubtedly congratulated. For some years now diphtheria, including membranous croup, and typhoid fever have been much less prevalent than previously; this circumstance may probably be explained by the fact that the general sanitary condition of the town has been and is being steadily improved year by year. It is a generally accepted opinion that these diseases depend directly or indirectly on filth conditions and foul emanations such as are associated with defective drainage, the existence of privy middens, and badly paved yards, etc., and there can be no question that a great deal has been done, and is being done, to abolish such conditions.

The cases notified at various age periods and in the various localities, together with those removed to hospital for treatment, are given in table 3 (Local Government Board return).

Vaccination.

In the following table the returns relating to primary vaccination of infants during the decennium 1893-1902 in the various registration districts of Stockport are exhibited. It is to be noted that these registration districts formerly included portions of Heaton Norris and Brinnington outside the Borough boundaries, but a rearrangement of the district was effected in 1902, so that a slight variation in the figures results. The number of certificates of successful primary vaccination received during the last five years has been as under :—

1899	.....	1,970
1900	.....	2,062
1901	.....	2,217
1902	.....	2,368
1903	.....	2,466

TABLE III.

LOCAL GOVERNMENT BOARD RETURN. STOCKPORT DISTRICT.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1903.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.							TOTAL CASES NOTIFIED IN EACH LOCALITY.																				NO. OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY.																Union Cases Treated in Union Hospital.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	At Ages*—Years.							Wards and Institutions.																				Wards and Institutions.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9	No. 10	No. 11	No. 12	No. 13	No. 14	No. 15	No. 16	Infirmary	Union Workhouse	Totals	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9	No. 10	No. 11	No. 12	No. 13	No. 14	No. 15	No. 16	Infirmary		Union Workhouse	Totals																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
								Lancashire Hill	Heaton Lane	Old Road	Portwood	St. Mary's	Vernon	Spring Bank	Hollywood	Edgeley	Shaw Heath	St. Thomas'	Hempshaw Lane	Cale Green	Heaviley	Reddish North	Reddish South				Lancashire Hill	Heaton Lane	Old Road	Portwood	St. Mary's	Vernon	Spring Bank	Hollywood	Edgeley	Shaw Heath	St. Thomas'	Hempshaw Lane	Cale Green	Heaviley	Reddish North	Reddish South																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Small-pox...	50	4	7	36	3	...	1	1	5	3	1	5	3	3	6	...	A	3	4	3	...	12	50	...	1	1	5	3	1	5	3	3	6	...	A	3	4	3	...	12	50	...																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Cholera

NOTES —The localities adopted for this table are the same as those in Tables II. and IV. Isolation Fever Hospital is situated in Heaviley (marked A.)
Smallpox Isolation Hospital is situated in Reddish South (marked B.)

Year ending 31st Dec'mb'r	No. of Births registered	Success-fully Vaccinated.	Insu'cep-tible of Vaccina-tion.	Had Smallpox.	Number in respect of whom Certi-ficates of Conscien-tious Objection have been received.	Dead Unvaccinated.	Postponement by Medical Certi-ficate.	Removal to dis-tricts the Vaccina-tion Officer of which has been duly apprised.	Removal to places unknown or which cannot be reach-ed and cases not having been find	Un-account-ed for.
1893	2682	1901	14	...	...	397	33	33	144	160
1894	2690	1890	15	..	...	403	64	25	166	127
1895	2858	1843	13	.	...	449	46	12	237	258
1896	2747	1927	24	.	...	446	60	14	187	89
1897	2861	2029	9	...	39	446	32	22	151	133
1898	2750	1935	9	..	58	481	38	13	149	67
1899	2725	1926	18	...	52	439	60	8	151	71
1900	2719	2062	16	...	55	417	51	14	87	17
1901	2566	2031	4	.	52	363	*29	8	65	14
1902	1937	1450	3	...	28	303	†32	45	65	36
Totals	26535	18994	125	...	284	4144	445	194	1402	972

I am indebted to the courtesy of C. F. Johnson, Esq., solicitor, Clerk to the Guardians, for these figures.

* 8 of these cases will never be fit to be vaccinated.

† 7 " " " "

The figures for the year 1902 are for the borough only.

Smallpox.

A Special Report was presented to your Committee about the middle of last year dealing with the outbreak from which the town had then suffered, so that it merely remains to record the fact that during 1903 50 cases were reported, 27 of these occurring in the month of January. The outbreak of 1902-3 practically terminated in July. In September a fresh source of infection was discovered in the town, but by dint of prompt and effective action only two others followed it.

Measles and Whooping Cough.

No less than 41 deaths were recorded from measles and 49 from whooping cough, at all ages, and 39 out of the 41 deaths from measles were at ages under five years. It is to be noted that the number of deaths from measles was exactly the same as that due to smallpox, scarlet fever, and diphtheria all combined, whilst the number of deaths from whooping cough (49) was almost as great as the total combined deaths from smallpox, scarlet fever, typhoid fever, and diphtheria, in other words, measles and whooping cough together cause nearly twice as many deaths as those due to what are usually regarded as four of the most virulent infectious diseases. This is a fact which calls for serious consideration. In the case of smallpox there can be no question whatever but that the strictest possible measures of notification, isolation, disinfection, and general sanitary supervision are demanded, but when one comes to compare the annual death toll from measles and whooping cough with that from scarlet fever, typhoid fever, and diphtheria, one is led to wonder whether we are on the right lines in devoting so much time and public money to the two last-named, whilst the two first-named are practically left alone. In my report for the year 1902 I gave a table which I reproduce here showing the number of deaths due to measles and whooping cough, and the remainder of the seven chief zymotic diseases put together :—

Year.	Deaths due to Measles and Whooping Cough.	Deaths due to the remainder of the seven chief zymotic diseases put together.
1893	70	94
1894	4	32
1895	116	53
1896	51	55
1897	111	43
1898	73	35
1899	124	24
1900	65	37
1901	64	56
1902	69	54
1903	90	92
Totals	837	575

These figures speak for themselves, and certainly call for some much more energetic preventive action to be taken in respect of measles and whooping cough, but until one is armed with some legislative power it is almost useless attempting to strike out. The first difficulty is the one of early knowledge of the existence of measles or whooping cough ; to some small extent information is derived from the various school teachers in the town, and I beg to record here my hearty thanks to those school teachers who have supplied the names and addresses of children under their charge who have been found to be suffering from these diseases. At the same time information derived from this source is defective, inasmuch as it is frequently late in arrival. The next difficulty is that of adequately supervising infected houses and infected children, and a further difficulty arises from the fact that adequate disinfection

tion is almost an impossibility owing to the staff and machinery at the disposal of the Department. It is surely possible for Government to frame some modified legislation to overcome these difficulties.

Diarrhœal Diseases.

In the extended table of mortality given at the end of this volume the deaths from diarrhœal diseases will be found included under two headings, first, those due to diarrhœa and dysentery, and second, those due to what is now termed epidemic or zymotic enteritis; the two together give the diarrhœal mortality in the Borough for the year 1903. The number of deaths registered as due to these two causes was 80, and of this number 65 deaths occurred under the age of one year. The large number of deaths occurring during the late summer and early autumn may be seen from the accompanying table, in which the streets affected and the date of death are recorded, whilst a glance at the table will also show the fact that a very large number of the deaths took place in the poorer localities where the most necessary precautions as regards proper feeding of infants, cleanliness, of food supply, etc., are probably most neglected.

Your Lady Inspectors have visited 61 houses in which deaths from diarrhœa occurred, and have made inquiries as to the method of feeding, employment of mother, general sanitary condition of premises, particularly cleanliness, etc. The results of these inquiries I hope to present to you in the form of a special report, when the figures are large enough for legitimate calculation. Here I may remark that in the case of the 61 deaths visited by the Lady Inspectors this year in only two cases were the children fed entirely on the breast, the remaining 59 being either wholly or partially bottle fed. It is somewhat noticeable that of the deaths from diarrhœa inquired into during 1903 a very large number had been fed on condensed milk for a considerable time before death.

Ward	Street	Day of Month	Month	Ward	Street	Day of Month	Month
11	(Union) Clifton st.	1...	1	11	Hempshaw lane...	8...	3
3	Belmont street	... 5...	1	6	Park lane	.....18...	6
3	Hesketh street	...14...	1	1	Manchester road	15...	7
3	Baker street	.....19...	1	4	Carrington road...	15...	7
2	Robin court, Gt. Egerton st..	3...	3	16	Weston street...	{ 21...7 } { 21...8 }	2 cases
	Pott's court do	20...	8	11	Arderfield street	24...	7
	Great Egerton st..	7...	9	4	Lancaster street...	24...	7
	do. do.	25...	9	14	Richardson street	29...	7
	do. do.	2...	10	1	Wharf street	.....30...	7

Ward	Street	Day of Month	Month		Ward	Street	Day of Month	Month	
6	Newbridge lane	30	7		10	Lucy street	30	8	
11	Edward street	31	7		9	Derby street	30	8	
3	{ Short street E. ... 1...8 Tomlinson's court, Short street ... 7...9 }			2 cases	11	Union street	31	8	
11	Brentnall street	5	8		12	{ Kirk's court, Angel street ... 31... 8 Angel street 4...10 }			2 cases
8	Coronation street	7	8		4	Hyde street	2	9	
11	Ratcliffe street	{ 9...8 12...8 }		2 cases	8	Northgate street	3	9	
12	Read street	11	8		9	Hardcastle road	3	9	
2	Brinksway road	11	8		6	Edwin street	6	9	
1	Rowland street	14	8		10	Thomas street W.	6	9	
6	George street	14	8		11	Harrison street	{ 7...9 24...9 }		2 cases
9	Mahood street	14	8		16	Frances street	11	9	
10	Union Workhouse	15	8		10	Organ court, Chapel street	16	9	
7	John street	17	8		7	Ridgway lane	18	9	
12	Stephen street	17	8		2	Heaton lane	19	9	
12	Johnson street	18	8		4	Howard street	19	9	
10	Pitt street	20	8		2	Longsight street	20	9	
3	Ince street	23	8		8	Brinksway	20	9	
12	Stafford street	27	8		13	Jepson street	20	9	
14	Charles street	{ 28... 8 8...10 }		2 cases	7	Loid street	21	9	
7	Wellington street	25	8		12	Webb lane	23	9	
4	Swann street	26	8		8	Bann street	24	9	
2	Travis street	29	8		15	Prenton View	25	9	
16	Wilton street	29	8		7	Piccadilly	29	9	

Ward	Street	Day of Month	Month	Ward	Street	Day of Month	Month
11	Bamford street	..30...	9	12	Higher Barlow row	3...	11
10	Bowden street	... 1...	10	13	Wild street.....	5 .	11
7	Duke street.....	2...	10	5	Pearson's court, High bankside	28...	11
14	Buxton road	..... 5...	10	10	Price's court, James street	... 2...	12
3	Dodge hill	.....16...	10				
13	Countess street	... 1...	11				

Scarlet Fever.

Again during 1903 the town was unfortunate in respect of the continuation of the epidemic of the previous year, and the occurrence of no less than 573 cases of this disease. During the commencement of the year, as will be seen from the following statement, the cases were notified at a rapid rate, and it was not until the beginning of the second half of the year that the outburst began to modify :—

	Cases.		Cases.
January.....	69	July.....	34
February	79	August	28
March	55	September	35
April	44	October	31
May	76	November	33
June	53	December	36

Ages of Persons Affected.

Of the 573 cases only four occurred in children under one year of age, this being in accordance with the general rule, viz., that children under the age of one are fairly immune from attack by scarlet fever. Between the ages of one and five years 161 attacks occurred, a rather smaller proportion than one expected to find. Between the ages of 5 and 15 the bulk of the cases occurred, viz., 361 altogether. When one considers that this age-period is that of school attendance, one sees the immense danger to schools which is present during an outbreak of this character. Between the ages of 15 and 25, 39 cases occurred, and between the ages of 25 and 65 eight cases.

Localities Affected.

St. Thomas', Hollywood, Shaw Heath, and Portwood Wards undoubtedly suffered out of proportion to the remainder of the town ; the attack rates per thousand of the population being 9·0 in St. Thomas' Ward, 6·6 in Hollywood Ward, 6·59 in Shaw Heath Ward, and 6·48 in Portwood Ward. There were only a very few cases of the disease reported in Reddish South, Reddish North, Lancashire Hill, and Old Road Wards. The attack rate for the town generally was 5·99 per thousand of the estimated population.

It was naturally impossible to isolate the whole of these cases in hospital, although undoubtedly a very large majority of them were cases which un-

doubtedly called for such treatment. However, we succeeded in isolating 322 cases in all, a percentage of 56. A good deal of care had to be exercised in selecting cases for hospital treatment, and inasmuch as the hospital accommodation was being strained to its utmost, and, in fact, was technically overcrowded, it was deemed more advisable to leave cases even imperfectly isolated at home rather than to expose the children to the dangers which are alleged to exist in the scarlet fever pavilions of crowded isolation hospitals.

Return Cases of Scarlet Fever.

Only 7 return cases of scarlet fever occurred during 1903, as compared with 18 during 1902, and this in spite of the fact that during 1903, no less than 322 cases were removed to hospital, as against only 277 in 1902. There is a possible explanation for this in the fact that during part of 1902 two separate diseases were treated at Dialstone Lane Hospital, and there was thus only one pavilion available during about half the year for scarlet fever cases; whilst during 1903 scarlet fever was so prevalent that I deemed it advisable to discontinue the hospital isolation of enteric fever and throw the whole of the two pavilions open for the isolation of scarlet fever. In this way it was possible to separate the acute from the convalescent cases, and the complicated from the uncomplicated, at the same time giving the whole of the cases a greater cubic and floor space, with consequently more fresh air space per patient. Like many other medical superintendents of hospitals, I am convinced that it is on these lines that we shall have to work if we are to rid ourselves of these troublesome return cases. Indeed it would be preferable not merely to remove the convalescent cases into a different pavilion when they have got beyond the acute stage, but to remove them to a convalescent hospital at some distance from the isolation hospital, thoroughly disinfecting them and their clothing before removal.

The following are the particulars of the return cases, which were most carefully inquired into, and it will be seen that in one case (No. 3) the period of incubation of the second or return case was rather more than one day; at the same time as this is a possible incubation period for scarlet fever the case has been included:—

1. A. B. First ill January 5th, rash January 7th. Previous sufferer F. B., discharged from hospital January 3rd, after 37 days' isolation. Patient had suffered whilst in hospital from nasal discharge, which, however, had ceased when he was sent out, and there was said to be no recurrence of this symptom after the patient had returned home. Patient occupied a separate bedroom, had separate eating utensils, and was not kissed or fondled by the person since attacked.

2. N. L. First ill March 4th, rash March 5th. Previous sufferer M. L., discharged from hospital February 27th, after 50 days' isolation; no complication whilst in hospital, no symptoms noticeable after patient's return home. Did not occupy separate bedroom or bed, was kissed by person since attacked. Mother stated that some skin had not peeled behind the ears, but an examination failed to verify this.

3. F. K. First ill June 16th, rash June 18th. Previous sufferer M. K., discharged from hospital June 15th, after 39 days' isolation ; no complications whilst in hospital ; patient is stated to have had some nasal discharge shortly after her return home ; she had played with the girl since attacked, but had not slept with her.

4. A. B. R. First ill October 16th, rash October 16th. Previous sufferer S. R., discharged from hospital October 6th, after 33 days' isolation ; no complications whilst in hospital ; patient stated to have some desquamation on the feet on his discharge ; did not occupy separate bedroom, but occupied a separate bed ; was not supplied by separate eating utensils. This patient, and the one who formed the return case, had almost constantly played together since S. R. returned home.

5. C. W. First ill September 26th, rash same day. Previous sufferer E. W., discharged from hospital September 10th after 38 days' isolation ; no complications in hospital ; no symptoms after patient's return home ; occupied a separate bed, but not a separate bedroom.

6. H. S. First ill on November 10th, rash November 12th. Previous case L. S., discharged from hospital November 3rd, after 45 days' isolation ; no complications whilst in hospital ; said to have had a small boil on back about November 4th ; did not occupy separate bed or bedroom. This child and his brothers had all played together in the house frequently.

7. H. N. First ill October 11th, rash same day. Previous sufferer E. N., discharged from hospital September 25th, after 32 days' isolation. Is stated to have suffered from nasal discharge whilst in hospital, and this was noticed to be present after her discharge. This child had played frequently with the one discharged from hospital.

Diphtheritic Disease.

Under this heading are included both diphtheria and membranous croup. The total number of such cases notified during the year was 29, of which 27 were directly reported as diphtheria and two as membranous croup. For some years now the number of cases of diphtheria reported has been a very low one, a fact upon which the town may be sincerely congratulated, for some neighbouring towns have not been quite so fortunate. I append a statement of the sanitary condition of the surroundings of the reported cases, and I would merely remark that it is rare for insanitary conditions to be discovered in connection with reported cases of diphtheria of a sufficiently serious nature to justify us in stating that they had been directly or indirectly the cause of the illness. This is directly in contradiction of the popular theory on this point.

During the year your committee decided to supply diphtheria antitoxin free of charge for both curative and immunising purposes to all classes of the population. Accordingly the following circular letter was forwarded to all the medical men in the town :—

Public Health Office,
Great Egerton Street,
Stockport,
May 11th, 1903.

Dear Sir,—

I have much pleasure in informing you that the Sanitary Committee have now made arrangements for the gratuitous supply of **Diphtheria Antitoxin** for both curative and immunising purposes to all classes.

Arrangements have now been completed by which any medical man practising in the Borough can obtain for use in any case of diphtheria or membranous croup arising in the Borough a free supply of diphtheria antitoxin on application between the hours of 8.30 a.m. and 5.30 p.m. on Mondays, Tuesdays, Wednesdays, Thursdays, and Fridays, and between the hours of 8.30 a.m. and 12.30 noon on Saturdays at these offices, and at times other than those stated on application at the Police Station, Warren Street.

The conditions upon which the serum will be supplied free of charge are those on the annexed sheet.

I may perhaps be allowed to draw your attention to the fact that no condition is imposed in respect of the *notification* of cases in which the serum is used, for it is quite possible that practitioners may desire to use the serum as a precautionary measure in cases which are suspicious only, and having regard to the greatly enhanced efficacy of the treatment when adopted in early stages of the illness, the Committee do not desire to impose any handicap upon its use.

The serum and syringe will be kept complete in a parcel ready for immediate use, but in all cases it will be necessary for the syringe to be sterilised before use. When time allows, the best way to sterilise is by taking it to pieces, placing the whole of the pieces in water and bringing the water to boiling point; but in cases where this is not practicable the most ready method is that of taking the syringe to pieces, placing it for a few minutes in 1 in 20 carbolic solution, and then running this solution through the syringe several times. Care should be taken if this method is adopted to subsequently wash the syringe through with pure boiled water before drawing the antitoxin into it, otherwise the carbolic solution will coagulate the serum in the syringe. A similar measure should be adopted when carbolic solution is used for sterilisation after use, and also when perchloride of mercury is used as the antiseptic. Serum for immunising purposes, in phials containing 500 units (for adults), and 300 units (for children) will be supplied on special request.

A specimen of the printed form alluded to in condition No. 4 is included for your inspection. The information thus derived may be used by the Health Department for statistical purposes, but, of course, I need scarcely say that in no instance will any names, addresses, or anything else be given which would be likely to lead to the identity of the practitioner or the patient concerned.

The Committee have resolved to try the system for an experimental period of twelve months from the present date, and it is to be sincerely hoped, therefore, that medical practitioners will, by making a discreet use of the method, encourage the Committee to continue what I am sure all medical men are agreed, is one of the best curative and preventive measures known for the treatment of diphtheria and membranous croup.

I need scarcely add that any assistance which can be afforded by this department in these cases will be most gladly accorded.

I am,

Yours faithfully,

MEREDITH YOUNG, M.D.,

Medical Officer of Health.

Conditions of Gratuitous Supply of Serum.

1. The serum will be supplied for hypodermic injection for either curative or immunising purposes, and medical practitioners will be expected to use their best endeavours to secure the injection of prophylactic or immunising doses in those exposed to infection.

2. The serum will only be supplied for use during *the first six days* of the disease and not afterwards.

3. In each instance in which it is used medical practitioners will be expected to take a swab for bacteriological examination as early as possible in the case (though not necessarily before the serum is injected), and a further swab at or near the completion of the illness with a view to ascertaining the termination and the duration of infectivity of the case.

4. Medical practitioners will be requested to make a return on a printed form to be supplied, showing the amount of the serum employed, result of illness, etc., together with any remarks likely to be of interest or practical utility to the Health Department. Information supplied in this manner will be regarded as confidential.

5. The syringe must be most carefully sterilised before and after use, and the attention of the Medical Officer of Health must be drawn to any defect at the time it is discovered, or at the time the syringe is returned, so that it may be at once remedied and the instrument always maintained in a state fit for use in emergency.

6. The Sanitary Committee do not desire to restrict the use of antitoxin for immunising purposes in any way whatever, but where it is used *solely* for curative purposes they would earnestly ask all medical men to restrict its free use under the present arrangement to those cases where the patient is unable to pay for a private supply.

7. That the antidiphtheritic serum is supplied on the distinct understanding that this committee accepts no responsibility or liability whatever for any ill-effects attributable (rightly or wrongly) to its administration.

(Confidential).

(Stamped addressed envelope enclosed.)

COUNTY BOROUGH OF STOCKPORT.

REPORT ON THE USE OF DIPHTHERIA ANTITOXIN.

Name of Medical Attendant

Date when serum supplied190

Name of Patient Age.....

Address

Dose or doses of serum employed

.....

.....

Duration of illness before serum was employed.....days.

Result of illness

Complications of illness.

(a) Before serum employed

(b) After ,, ,,

Remarks (if any)

.....

.....

Date.....190.

Signature of

Medical Attendant

N B.— It is requested that this form be returned to

THE MEDICAL OFFICER OF HEALTH,

SANITARY OFFICE,

STOCKPORT.

There can be no question that several cases have been saved from a severe attack of the disease by the early use of this remedy, and by thus cutting short the period of infection your committee have limited the possibilities of spread of this disease. A benefit has therefore been conferred not merely upon the individual, but also upon the community. In the conditions which your committee will observe attached to the gratuitous supply of serum No. 2 is one which probably needs a little explanation, viz., that the serum will not be supplied after the sixth day of illness unless under exceptional circumstances and at the discretion of your Medical Officer of Health. This condition is imposed primarily in order to secure the use of antitoxin at the earliest possible stage of the disease, for it has been found that in proportion as the administration of antitoxin is delayed so does the mortality of the cases treated increase. For example, in the State of Massachusetts, it was found that amongst those treated during the first two days of illness the cases only died at the rate of 6·6 per cent., whereas in those in which the serum treatment was delayed until the sixth day or later the case mortality was nearly three times as great, viz., 17·8 per cent. In addition to this the longer the infected system is left without artificial antitoxin the larger must be the dose of that antitoxin administered, because there is more of the toxin or diphtheria poison formed in the system. There is thus a double disadvantage in delay, for firstly a case of diphtheria treated with antitoxin in the later stages requires naturally a very much greater amount of antitoxin to neutralise or act as an antidote to the diphtheria toxin formed, this implying a much greater cost for each case treated ; and secondly, and most important, the chances of the antitoxin doing good at that late stage are very remote. I am pleased to be able to say that a number of medical men have utilised this beneficial arrangement, and have spoken most highly of it. I have not heard of any cases in which the serum has been used for immunising purposes, and I therefore venture to express the hope that the benefits of this will not be lost to sight by the medical practitioners in the town.

Year 1903.

Folio No.	Street.	Age.	Sex.	Closet Accommodation.	Paving of yard.	Paving of Passages.	Remarks.
7	Newton Street, N. Reddish.	7	M.	Waste water.....	Paved.	Nil.	...
9	Clarke Street, S. Reddish.	3	M.	Privy 8 yds. away	Earth.	Nil.	Fatal. Defective drainage and slopsodden yard.
41	Alpine Road	16 mos.	M.	Privy 8 yds. away	Nil.	Partly paved.	Offensive privies.
42	Do. do.	2½	M.	do. do.	do.	do.	Fatal. Infected by contact with case 41.
44	King Street West ...	3	M.	Privy 7 yds. away	Partly cobbled.	Partly cobbled.	Fatal. Offensive privies.
45	Brook Street, S. Reddish.	10 mos.	M.	Privy 6 yds. away	Earth.	Nil.	Fatal. Defective drainage, privy-midden in bad condition, and slopsodden yard.
63	Farmer Street	5	F.	W.C. outside	Paved.	Nil.	Fatal.
74	Castle Street.....	5	M.	Privy 3 yds. away	Paved.	Paved.	...

Folio No.	Street.	Age.	Sex.	Closet Accommodation.	Paving of Yard.	Paving of Passages.	Remarks.
198	Mottram Street.....	38	F.	Privy 3 yds. away	Partly paved.	Paved.	...
199	Ladysmith Street.....	22	F.	W.C. outside	Partly paved.	Earth.	...
223	Thomas Street, N. Reddish.	5	M.	Privy 4 yds. away	Paved.	Earth.	Drainage in passage at rear often blocked.
224	Do. do. ...	5	F.	do. do.	do.	Earth.	Infected by contact with case 223.
233	Back Piccadilly	3	M.	W.C. outside	do.	Paved.	Fatal.
242	Love Lane	1½	F.	Privy 12 yds. away	do.	Nil.	...
282	Laurel Street	13 mos.	F.	Privy 8 yds. away	Cobbled.	Nil.	Defective drainage and offensive privies.
296	King Street West ...	8	M.	Privy 10 yds. away	Paved.	Paved.	...
381	Heath Street	10 mos.	M.	Privy 7 yds. away	Partly cobbled.	Earth.	Defective drainage, offensive privies, and sodden yard.
439	Pine Street	15 mos.	F.	W.C. outside	Partly paved.	Paved.	...

Folio No.	Street.	Age.	Sex.	Closet Accommodation.	Paving of Yard.	Paving of Passages.	Remarks.
543	Manchester Street, North Reddish	1½	M.	W.C. outside	Paved.	Paved.	...
559	Booth Street.....	2½	F.	Privy 4 yds. away	Concreted.	Concreted.	...
590	Tatton Road South ...	3	M.	Privy 10 yds. away	Partly paved.	Nil.	Fatal.
593	Coronation Street, South Reddish	22	M.	Privy 5 yds. away	Cobbled.	Cobbled.	Defective drainage and offensive privies.
606	Gorton Road, North Reddish	32	F.	W.C. outside	Paved.	Earth.	Drainage in cellar un- trapped.
612	Sandy Lane	2	M.	W.C. outside	Paved.	Nil.	...
646	Florist Street	40	F.	W.C. outside	Partly paved.	Partly paved.	Complained of bad smells from street gullies. Manhole opposite house
690	Grimshaw Street.....	31	F.	W.C. outside	Paved.	Paved.	...
719	School Street	2	M.	Privy 3 yds. away	Paved.	Paved.	Fatal.
738	Greek Street.....	32	F.	W.C. outside	Concreted.	Paved.	...
752	Church Street	7	F.	Privy 12 yds. away	Partly paved.	Nil.	Fatal.

Typhoid Fever.

During the year 1903 only 34 cases of this disease were notified, or nearly half the number reported in 1902. This is a most gratifying decrease, and one can only hope that it will be permanent. Ten of the 34 cases occurred during the month of October. In a few cases it was possible to definitely trace the causation of the disease to the consumption of shell fish at seaside resorts favoured by this population, whilst in a few other cases one obtained information of the consumption of shell fish from itinerant vendors whom it was impossible to trace. The case against shell fish as one of the casual agents in the dissemination of typhoid fever may now be regarded as established. In the last Interim Report of the Royal Commission on Sewage Disposal issued in 1904, it is stated that the Commission received a large amount of evidence from Medical Officers of Health on the contamination of shell fish, and they stated that it was not safe, neither was it desirable, to eat oysters, the juices of which were impregnated with sewage, no matter in how dilute a condition. The Commission were satisfied that a considerable number of cases of enteric fever and other illnesses had been caused by the consumption of shell fish which had been exposed to sewage contamination. It was not possible for them to make an actual numerical statement on this point, but they went so far as to state that the evil was sufficiently grave to demand a remedy. It is to be sincerely hoped, therefore, that no delay will be made in dealing with those fore-shores and oyster-layings which are obviously polluted, for the evils caused by them are not confined by any means to seaside towns, in fact it is probable that persons living at seaside towns and regularly consuming polluted oysters and other shell fish gradually acquire some degree of immunity against the evil effects of this pollution, whilst those who migrate for a short period each year to seaside towns and consume polluted shell fish develop ill-effects with much greater readiness. A parallel case to this may be found in the well-known fact that country people may for years drink seriously polluted water and yet remain free from illness, whilst townpeople going to stay in the country for a short time, and being compelled to drink this polluted water, develop acute illness from it. In the following statement which is carried forward from previous years, the prominent part played by polluted privy-middens impregnating the spread of typhoid fever is well illustrated, and it forms a strong argument for the total abolition of all such insanitary structures. The figures relate to cases which have occurred from 1894 to 1903, both years inclusive.

In 76 houses 1 subsequent case occurred, viz. :—

In 57 houses	within a few weeks.
„ 13	„ about 1 year later.
„ 3	„ „ 2 years later.
„ 1	„ „ 3 „ „
„ 2	„ „ 4 „ „

In 22 houses 2 subsequent cases occurred viz. :—

In 18 houses	within a few weeks.
„ 1 house	about 1 year later.
„ 3 houses	„ 2 years „

In 4 houses 3 subsequent cases occurred, viz. :—

In 3 houses	within a few weeks.
„ 1 house	about a year later,

In 3 houses 4 subsequent cases occurred, viz. :—

2 within a few weeks and 1 about 3 years later.

In 3 houses 5 subsequent cases occurred, of which

2 were within a few weeks, the other 4 years later.

In 1 house 7 subsequent cases occurred within a few weeks.

„ 1 „ 8 „ „ „ „ „ „

Tubercular Diseases.

The death-rate from this group of diseases during 1903 was 2·41, or slightly in excess of that for 1902. The death-rate from phthisis pulmonalis or consumption of the lungs was 1·64 per thousand, that from other tubercular diseases being 0·77. In the following statement the death rates from these two groups of diseases are given for the last ten years :—

Years.	Phthisis Pulmonalis.	Other Tubercular Diseases.
1894.....	2 03	—
1895.....	2·20	0·78
1896.....	1·91	0·49
1897.....	1·68	0 75
1898....	1 91	0·66
1899.....	1·85	0 53
1900.....	1·75	0·84
1901.....	1·49	0·48
1902.....	1·62	0·46
1903.....	1 64	0·77

The death-rate from phthisis pulmonalis was exceptionally high in the following four wards :—

Vernon Ward	2·86
Spring Bank Ward	2·80
Hempshaw Lane Ward	2·69
St. Mary's Ward	2·59

Whilst in Edgeley Ward it was only 0·92, and in Heaviley Ward 0·96.

The system of voluntary notification of cases of phthisis has not, I regret to say, met with a very hearty response on the part of medical practitioners, only five cases having been reported during the whole of the year. In cases which come to our knowledge either by voluntary notification or otherwise the following card giving simple precautions for the prevention of the illness is left at the house, and any required assistance or advice in the matter of disinfection, cleansing, improvement of sanitary surroundings, etc., receives attention :—

PRECAUTIONS FOR PERSONS SUFFERING FROM
“ CONSUMPTION.”

Consumption or Phthisis is, to a limited extent, an infectious disease. It is spread chiefly by inhaling the expectoration (spit) of patients which has been allowed to become dry and float about the room as dust.

Do not spit except into receptacles, the contents of which are to be destroyed before they become dry. If this simple precaution is taken there is practically no danger of infection. The breath of phthisical persons is free from infection except in the later stages of the illness, when air coughed out of the lungs is apt to contain infectious matter.

The following detailed rules will be found useful, both to the sufferer and to his friends :—

1. Expectoration indoors should be received into small paper bags, or similar receptacles, and burnt immediately.

2. Expectoration out of doors should be received into a suitable pocket bottle, to be afterwards washed out with boiling water ; or into a small paper handkerchief, which is afterwards burnt.

3.—If ordinary handkerchiefs are ever used for expectoration they should be put into boiling water before they have time to become dry, or into a solution of a disinfectant, as directed by the doctor. The pocket in which they have been kept should have a removable lining, which should be similarly treated.

4.—Wet cleansing of rooms, particularly of bedrooms occupied by sick persons, should be substituted for “dusting” and sweeping.

5.—Sunlight and fresh air are the greatest enemies of infection. Every consumptive patient should sleep with his bedroom window open, a screen being arranged, if necessary, to prevent direct draught. The patient need not fear going out of doors in any weather, if warmly clad.

N.B.—The patient himself is the greatest gainer by the above precautions, as his recovery is retarded and frequently prevented by renewed infection derived from his own expectoration.

6.—Persons in good health have no reason to fear the infection of phthisis. Over-fatigue, intemperance, bad air, dusty occupations, and dirty rooms favour the disease.

Notifications are received from the registrars of all deaths from pulmonary consumption registered by them, and in these cases an inspector visits the house and advises on any necessary disinfection, etc., this being carried out by the Department when requisite free of all charge.

From the following table it may be seen that in spite of cleansing and disinfection tuberculosis shows a tendency to attach itself to certain houses. It is probable that in these cases the measures of cleansing and disinfection have not been on the right lines or have not been sufficiently searching.

List showing localities in which deaths from consumption have occurred
in the same house in succeeding years :—

Situation of house.	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903
Barratt Street	1	...	...	...	...	...	1
Beard Street	1	...	...	...	...	1
Bentley Street	1	...	...	1	...	...	...	...	...
Bury Street	1	...	1	...	...	...	...	...
Clarendon Street.....	1	...	1
Ellen Street	2	...	...	...	...	...
Grafton Street	1	...	1	...	...	...
Ince Street	1	...	...	1	...	...	...	...	...
Manchester Road (House A)	2	...	...	...	...	...	...	...	...
do. do. („ B)	1	...	1	...	...	...	...
Old Road	1	...	...	1	...	...	...	...	...
Reuben Street	1	...	1	...	...	...	...	...
Rowland Street	1	...	1	...
Smith Street (House A)...	1	1	...	...	...	...	...	...	...	...
Do. („ B)	1	1	...
Bridgefield Street	1	...	...	...	...	...	1	...
Brown Street	2
Brunswick Street	2	...	...	...
Chorlton Street	1	...	1	...	...	...	...	...	...	...
Great Egerton Street	1	1	...	...
Heaton Lane	1	...	1	...	...	...	...	...	...
Travis Street	2	1
Wellington Road North...	1	...	...	...	1	...
Wyatt Street	1	1
Adlington Square	1	...	...	...	...	1	...
Churchgate	2	...	...	...	...	...	...
High Bank Side	1	...	...	...	...	...	...	...	1
High Street (House A) ...	1	...	...	...	...	...	...	1	...	...
Do. („ B)	1	...	1	...
Tatton Street	1	...	...	...	...	...	...	1	...
Edwin Street	1	1
Grimshaw Street.....	2	...	...	...	...	...	...	...	...	...
Newbridge Lane (House A)	1	...	1
Do. („ B)	2
Bann Street.....	...	1	...	...	...	...	...	...	...	1
Chestergate	2	...	...	...	...	...	...	...
Daw Bank	1	...	...	...	...	...	...	...	1	...
London Place (House A)...	...	1	1	...	...	...	...	...	...	...
Do. („ B)	1	1	...	...	...	...	...	...	...
Brinksway (House A).....	...	1	1	...	...	...	...	...	...	...
Do. („ B).....	1	...	...	...	1	...
East Street (House A)	1	...	1	...	...	...	...	...	...
Do. („ B)	1	...	...	...	1	...	...
Do. („ C)	2	...	...
Grenville Street	1	...	...	...	...	1	...	...
Lottery Street	1	...	1	...	...	...	...	...

Situation of house.	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903
Moss Street	1	...	1	...	...	...	...	...	...
Lomas Street	1	...	...	...	1	...	...	...	...
Stopford Street	2	...
Booth Street	2	...	...	...	...	...	...
Bowden Street.....	1	...	...	...	1	...	...	...	...	...
Carlile Street	1	...	...	...	...	...	...	1	...	...
Chatham Street	1	1	...	...
James Street	1	...	...	...	...	1	...	...	...	...
Shaw Heath.....	1	1
Edward Street.....	3	...	...	...	...	...	...	...
Higher Hillgate	1	...	...	...	...	...	...	1
Middle „	2	...	...	...
Angel Street.....	1	...	...	...	1	...	...	...
Rosemary Lane (House A)	1	1	...	...
Do („ B)	1	1	...	1
Shawcross Street.....	1	1	...	...	...
Bramall Lane	2	...
Heath Crescent	1	1	...
Osborne Road	1	...	...	...	...	1	...	...	...
Dialstone Lane	1	...	...	1	...	...	...	...	...	...
German Street.....	1	...	1	1	...	...	...	...

Infant Mortality.

During the year 1903 515 deaths occurred in children under one year of age, a number equal to 184 per thousand children born. Expressed in another manner this means that more than one-sixth of the total children born did not survive the first year of life. Stockport is one of the towns in England and Wales in which the record of infant mortality is undoubtedly bad, but there is one pleasing feature in connection with the infant mortality figure, and that is that it is showing a fairly steady decrease as evidenced by the following figures :—

Year.	Deaths under 1 year.	Death-rate per 1,000 births.
1891.....	522	224
1892.....	463	199
1893.....	522	222
1894.....	442	192
1895.....	568	231
1896.....	452	189
1897.....	531	214
1898.....	551	231
1899.....	518	221
1900.....	467	203
1901.....	431	197
1902.....	477	183
1903.....	515	184

In a number of the cases in which death has occurred, your Lady Inspectors have visited the homes, and in addition to making inquiries as to the various factors combining to produce a fatal result, have endeavoured to instil into the minds of the mothers rational and proper ideas on the subjects of infant feeding and general infant management. In this connection 61 cases where death had resulted in infants from diarrhœa have been visited, and the remarkable discovery was made that in only two of these cases was the child said to have been fed entirely on the breast. In both of these cases, too, a complete explanation was available of the apparent anomaly, for in one of them the mother had had to go to work food picking, and had left the child for a considerable time in the care of an old woman, whilst in the other case the child had been delicate from birth, and only lived for a month.

In addition to this attempt to lessen infant mortality, an endeavour has been made to visit every house in the poorer localities in which a birth has occurred, and no less than 1,223 such cases have been visited during 1903 by your Lady Inspectors. In a large number of these cases the first visit showed that the mother was conducting the feeding and general management on proper lines, but in still a large number it was found that the mother had inherited old-established and baneful notions on these matters, and it was deemed advisable to re-visit the houses on a good many occasions until an improvement was clearly manifest. That this work has been productive of good it is impossible to doubt. Not only are deaths averted, but in the majority of cases it cannot be doubted that a better system of feeding and management has resulted in the rearing of stronger infants more fitted to fight against the many dangers which threaten child life in a large town such as this.

From the following figures will be seen the causes which are principally at work in producing infant mortality in this town :—

	Deaths.
Measles	13
Whooping Cough	24
Diarrhœa	65
Congenital Syphilis	7
Tubercular Diseases.....	13
Premature Birth	39
Debility at Birth	28
Congenital Defects	17
Atrophy, Debility, and Wasting.....	80
Dentition	16
Convulsions and other Nervous Diseases.....	49
Acute Bronchitis	64
Broncho Pneumonia.....	20
Inflammation of Bowels	37
All Other Causes	43
Total.....	515

In this same connection it may be convenient to reproduce some figures which have been classified at my request by your Lady Inspectors and which have been obtained by the visitation of houses at which births had recently

occurred. Amongst 693 children found to be entirely breast-fed 646, or 93·2 per cent. were classed as healthy, and 47, or only 6·8 per cent. as delicate. Amongst 62 children partially breast-fed 43 or 69·3 per cent. were classed as healthy, and 19 or 30·7 per cent. as delicate. Whilst amongst 255 infants fed entirely on the bottle 112 or 43·9 per cent. were classed as healthy, and 143 or 56·1 per cent. as delicate. The figures speak emphatically in favour of breast feeding. A curious fact came to the knowledge of your Lady Inspectors in this connection, viz., that during the second half of the year when work began to be somewhat scarce there was a marked increase in the number of children fed entirely on the breast, and a corresponding increase in the number of healthy children as compared with delicate ones, the explanation being, of course, that the mothers had no work to go to, and were not tempted to leave their children to the charge of some ignorant old woman. A similar condition of affairs is historical as having occurred during the Siege of Paris and during the time of the Cotton Famine.

NUMBER OF BABIES VISITED FROM JUNE 1ST TO
DECEMBER 31ST, 1903.—581.

		Healthy.	Delicate.
Number of babies fed on the breast	{ 403	368	35
	{ 69·3	63·3	6
Number fed partially on the breast	{ 39	23	16
	{ 6·7	4	2·7
Number of babies fed by hand.....	{ 139	59	80
	{ 23·9	10·1	13·8

Cancer.

The following table contains a statement of the deaths from cancer during 1903, distinguishing the various parts of the system affected. Unfortunately, at present, cancer is a disease outside the scope of the work of a public health department, but one cannot help feeling that a greater diffusion of knowledge amongst the public of what are known as “pre-cancerous conditions,” that is, certain slight affections or manifestations of illness which precede, often by several years, the onset of actual cancerous disease would lessen both the suffering and the mortality from this terrible disease. Many of these “pre-cancerous conditions” are either caused or aggravated by things which might easily be removed or avoided, and the onset of the actual disease either averted altogether or at the least postponed.

DEATHS FROM CANCER, 1903.

Part affected.	M.	F.
Mouth.....	1	—
Lip ..	1	—
Skull, Base of	1	—
Upper Jaw.....	1	—
Tongue	3	1
Cheek	—	1
Pharynx and Œsophagus	1	1
Stomach	7	7
Liver	3	9
Rectum	3	1
Peritoneum ..	—	1
Larynx	1	1
Lungs	—	1
Breast	—	10
Uterus.. ..	—	15
Bladder	2	—
Kidney	1	2
Neck	2	—
Heart	—	1
Locality not stated	—	4

Deaths in Cellar Dwellings.

There are about 150 of these in the town, inhabited by about 400 persons. As the deaths show these dwellings are occupied by old people or by young and poor married couples, hence the deaths occurring in them are, in the main, those of aged people or young infants.

A statement of the deaths which have occurred in these dwellings during the past nine years is subjoined.

Date of Death.	Where Died.	Age.	Sex.	Occupation.	Cause of Death.
1903. Jan. 9	Cellar under 30, Union Street	66	M	Collier (See year 1895)	Bronchitis, Cardiac Failure
Feb. 24	„ 85, Old Road	62	F	Reeler in Cotton Mill	Found dead, Natural Causes, accelerated by want of care and timely medical attention (Inq'st)
May 10	„ 127, Old Road	70	F	...	Natural Causes, Bronchitis (Inquest)
„ 26	„ 85, Old Road	69	F	...	Bronchitis, Asthma
August 31	„ 26, Union Street	7 m'nths	F	...	Epidemic Diarrhoea
Dec. 15	„ 21, Bamford Street ...	59	F	...	Cardiac Dropsy
1902. Jan. 6	„ 9, Angel Street	55	F	...	Apoplexy
October 2	„ 13, Bamford Street ...	77	F	...	Senility
Nov. 6	„ 22, Newbridge Lane...	2 m'nths	M	...	Bronchitis, Exhaustion
Dec. 3	„ 49, Bamford Street ...	69	F	...	Apoplexy
1901. May 23	„ 28, Newbridge Lane..	4 weeks	F	(See year 1900)	Natural Causes, probably Con- vulsions (Inquest)
August 21	„ 55, Union Street	5 m'nths	M	...	Marasmus

Date of Death.	Where Died.	Age.	Sex.	Occupation.	Cause of Death.
Nov. 15	Cellar under 12, Union Street	10 m'ths	F	...	Premature Birth
1900. Feb. 9	" 141, Old Road "	3 days	M	...	Inanition
April 4	" 28, Newbridge Lane...	4 days	M	(See year 1901)	Convulsions (Inquest)
" 23	" 26, Crowther Street ...	2 m'nths	M	...	Bronchitis (Illegitimate)
June 12	" 25, Old Road	5 m'nths	F	...	Ac. Bronchitis
1899. August 13	" 150, Hesketh Street ...	73	M	Gen. Labourer	Senile Decay
" 22	" 22, Brewery Street ...	7 m'nths	M	...	Starvation (Inquest), Illegitimate
Oct. 12	" 4, Wesley Street	14 m'ths	F	(See year 1895)	Bronchitis (Illegitimate)
1898. August 29	" 18, Brewery Street ...	8 m'nths	F	...	Teething-Bronchitis
1897. March 19	" 1, Adcroft Street	76	M	Hawker	Syncope following Bronchitis (Inquest)
April 2	" 55, Lancashire Hill ...	65	M	Scavenger.....	Gastric Catarrh
" 29	" 40, Union Street	1	F	...	Dentition and Convulsions

♂	August 19	Cellar under 29, Union Street	3 m'nths	M	...	Marasmus, Convulsions
	1896.					
	Jan. 3	In a cellar at Christy's Mill	62	M	Carter	Natural Causes (Inquest)
	April 8	Cellar under 145, Old Road	81	M	Army Pension'r	Senile Decay
	" 25	" 10, Hart Street	5	M	...	Whooping Cough
	Sept. 28	" 15, Union Street	60	F	Hat Trimmer..	Bronchitis
	Nov. 22	" 4, Hart Street	5 weeks	F	...	Bronchitis and Inflammation (Inquest)
	1895.					
	Jan. 29	" 3, Angel Street	6 m'nths	M	...	Bronchitis (Illegitimate)
	April 15	" 12, Old Gardens Street	4 m'nths	M	...	Tabes Mesenterica, Exhaustion
	" 20	" 30, Union Street	5 m'nths	F	(See year 1903)	Marasmus
	June 26	" 4, Wesley Street	6 m'nths	M	(See year 1899)	Inanition from Birth (Illegitimate)
	August 8	" 61, Lancashire Hill ...	67	M	Mill Operative.	Right Hemiplegia, Cerebral Hæmorrhage
	October 18	" 30, Union Street	35	F	(See year 1903)	Morbus Cordis

CAUSE OF DEATH	WARDS																				Totals	Deaths in outside districts belonging to the Borough	INSTITUTIONS.								
	All Ages	Under 1	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upward	1	2	3	4	5	6	7	8	9	10	11	12	13			14	15	16	Bishop Brown Memorial School	Infirmary	Union Work-house	Isolation Hospital		
I.—ZYMOTIC DISEASES:—																															
Small-pox	5					5			1					1			1	1	1					5					5		
Measles	11	13	26	2						3	4	3	8	1	1	4		2	2	3	7	3	41								
Scarlet Fever	27		17	9	1			1		2	1	1	2	4	3	3	5	2			1	2		27					15		
Typhus Fever																															
Influenza (Epidemic)	5		1	1	1	6		1	2	1					1			1	1	1	1		9	1							
Whooping Cough	19	21	21	1					6	3	3	2	3	8	2	3	2	4	2	1	5	3	2	19							
Diphtheria	9	1	6	2				1	1	1			1	2	1								2	9							
Enteric	13		1	1	6	5			3	2					1	1					4	1	1	13					1		
Diarrhoea, Dysentery	12	33	3			5			1	3	2	1	2	2	4	1	4	9	1	3	1	1	1	12	1			3			
Epidemic or Zymotic Enteritis	38	32	6					3	5	4	3		2	1		2	3	2	4		3		3	38							
Parotitis																															
Tetanus																															
Other Allied Diseases	1			1								1												1							
II.																															
Syphilis	7	7												1		1	4		1					7					4		
Gonorrhoea	1					1								1										1	1						
III.—SEPTIC DISEASES:—																															
Erysipelas	1	1				3				1	1	1					1							4					1		
Puerperal Fever	7				1	6			1							2		2			1		1	7							
Pyæmia, Septicæmia	1					1											1							1				1			
Septic, Ulcerative or Infective Endocarditis	1					1			1															1							
Stomatitis	2	1				1				1		1												2				1			
Cellulitis	1				1													1						1							
Other Allied Diseases																															
IV.																															
Remittent Fever																															
Rheumatic Fever	4		2			2				1		1			1					1				4							
V.—TUBERCULAR DISEASES:—																															
Tuberculosis of Brain or Meninges (Acute Hydrocephalus)	26	5	11	8	1	1			3		6	3		1	1	1	1	3	1		1	4	1	26							
Tuberculosis of Larynx	1					1							1											1							
Tuberculosis of Lungs	146		5	5	26	109	1	7	6	6	12	9	16	13	12	6	9	10	13	9	6	6	6	146	5	1		27			
Tuberculosis of Intestines (Tabes Mesenterica)	11	3	5	1	1	1		1	1	1				1	2				1				3	1	11			1	1		
Tuberculosis (General)	28	5	9	7		6	1	3	3	2	6	2	1	2	1		4		1		2	1		28			3	7			
Tubercular disease of undefined position																															
Other forms of Tuberculosis, Scrofula	3			2	1								1							1	1				3						
VI.—																															
Thrush	1	1							1															1							
Acute Alcoholism (Delirium Tremens)	1					1				1														1							
Chronic Alcoholism	6					5	1		2		1						1	1			1			6				1			
Arsenical Poisoning																															
VII.—CONSTITUTIONAL DISEASES:—																															
Osteo-arthritis (Rheumatoid Arthritis)	6				1	4	1		1							1	1			2			1	6							
Cancer	82		1	1		57	23	4	7	5	9	5	8	2	7	4	3	7	1	9	4	2	5	82	2		4	11			
Diabetes Mellitus	7					5	2									4	1	1		1				7							
Purpura Hæmorrhagica																															
Anæmia Leucocythæmia	4		1			1	2		1								1			2				4							
Lymphadenoma (Hodgkin's Disease)	2			2									1					1						2							
VIII.—DEVELOPMENTAL DISEASES:—																															
Premature Birth	39	39						4	1	3	3	1	1	2	2	5	2	1	6	2	4	2		39					1		
Injury at Birth	1	1											1											1							
Debility at Birth	28	28							5			6	2	5	2	1	3	1	1		2			28							
Atelectasis	7	7										1					1	1	1			2	1	7				2			
Congenital Defects	12	10	1	1					2		1	1	2				1		2	1		1	1	12							
Want of Breast Milk	3	3								2								1						3							
Atrophy, Debility, Marasmus	82	80	2					5	4	6	7	1	5	6	9	4	8	7	3	3	4	1	9	82				4			
Dentition	26	16	10						1	1	6	3	3	2	1	1	1		3	1			3	27							
Rickets	4	2	2					1					1			1					1			4							
Old Age (Senile Decay)	96					9	87	4	7	15	5	5	3	5	5	6	8	12	2	9	5	3	2	96	1			15			
IX.—DISEASES OF NERVOUS SYSTEM:—																															
Convulsions	47	42	5					3	1	1	4		4	1	6	3	5	6	8	3	2			47							
Meningitis	14	4	6	3		1		1		2	1		1	2	1	1	1	1		1			2	11				1			
Encephalitis																															
Apoplexy	24					12	12			1	1	2		2	3	1	5	1		2	1	1	1	24				3			
Softening of Brain	4					2	2			1				2						1				4	1			1			
Hemiplegia (Brain Paralysis)	9					6	3	1		1				1			3	1						2	9			2			
General Paralysis of Insane	6					5	1			1	1					1	1			1	1			6	4			1			
Other Forms of Insanity	6					1	5				1			1			1	1													

CAUSE OF DEATH

I. Zymotic Diseases -

Small-pox	2	1
Measles	41	19
Scarlet Fever	27	
Typhus Fever		
Influenza (Epidemic)	0	
Whooping Cough	43	21
Diphtheria	0	1
Enteric	13	
Dysentery	17	38
Epidemic or Zymotic Cholera	35	32
Parotitis		
Tetanus	...	
Other Allied Diseases	1	

II

Syphilis	2	1
Gonorrhoea	0	

III. - Surgical Diseases -

Erysipelas	4	1
Pyæmia	2	
Pyæmia, Septicæmia	1	

PART II.

Departmental.

PART II.

DEPARTMENTAL.

District Inspectorial Work.

In the subjoined table will be found a statement of the work done in the various districts by the four Inspectors engaged in the general work of those districts. The table shows a splendid advance in the improvement of the general sanitary condition of the town. Although this particular kind of work is continually absorbing the time and energies of the Department, it is one which will never reach finality.

Again, it will be seen that a very large number of those abominable and ever insanitary privy middens have been abolished, and water-closets with dry ashpits or dust bins substituted ; indeed this is one of the most prominent features in the sanitary history of the last ten years of the town ; and when, as is to be hoped will soon come about, the last of these abominations has been cleared away the town may look forward to a lowered death-rate and to a diminution of many of those diseases in the causation of which privy-middens and other allied insanitary conditions play such an important part.

The work has continued to be well done, and, considering the amount of it, there has been surprisingly little trouble with property-owners or agents. A glance at the subjoined statement will show not only the immense amount of work carried out, but also its varied nature. The largest part of this work has been done without the necessity of serving legal notices, whilst in only one isolated case was it requisite to enter legal proceedings against an owner for failure to do certain work ; and in this instance the case was withdrawn on the owner undertaking to carry out all the specified measures and pay the costs of the case. This speaks volumes for the tact and management of your District Inspectors.

The work of the Special and of the Female Inspectors is detailed later in the report.

	No. 1 District	No. 2 District	No. 3 District	No. 4 District	Total.
I.—SPECIAL COMPLAINTS RECEIVED...	58	28	52	76	214
II.—INSPECTIONS MADE.					
Dwelling-houses	259	368	220	132	979
Cellar Dwellings	3	15	26	18	62
Common Lodging-houses.....	...	34	80	12	126
Male Outworkers	6	12	22	24	64
Schools .....	...	...	1	6	7
Courts and Yards	166	310	464	250	1190
Privy Middens	1143	1215	1549	750	4657
Drainage	311	386	509	355	1561
Watercourses .....	...	15	11	12	38
Miscellaneous	363	198	380	208	1149
III.—INFECTIOUS DISEASE.					
Cases inquired into	106	261	137	208	712
Cases removed to Hospital. .	39	149	50	94	332
Houses Disinfected	88	281	125	180	674
Schools Disinfected	2	12	4	9	27
Persons Bathed and Disin- fected	6	14	16	13	49
IV.—PRIVIES, WATER CLOSETS, &C.					
Privies Repaired	2	15	54	21	92
„ Converted to W.C.'s...	265	202	138	177	782
Dustbins renewed	11	9	23	36	79
V.—MISCELLANEOUS.					
Houses Cleansed & Papered, or Limewashed	35	115	185	...	335
Overcrowding of Houses Abated.....	4	5	1	...	10
Houses Repaired	23	22	66	...	111
Urinals Reconstructed	1	...	...	...	1
Yards, Courts or Passages paved or repaired	26	28	54	35	143
Yards, Courts or Passages drained	47	40	49	71	207
Accumulations removed	13	30	12	7	62
Manure Pits provided or repaired	3	...	2	3	8
Animals improperly kept	7	10	3	13	33
House Drainage Tested..	1	20	12	32	65
„ Repaired or Reconstructed	332	230	243	197	1002
Notices (informal) Served.....	114	138	140	135	527

Report by Female Sanitary Inspectors to Medical Officer of Health on Special Work done during 1903.

VISITING OF NON-NOTIFIABLE INFECTIOUS DISEASES.

As the Epidemic Giant has been stopped in the schools, the teachers have not reported the infectious cases as well as formerly. The cases reported and visited this year number only 584—a number which is usually three or four times as great.

Most of the cases were measles, in the districts of Reddish, Banks Lane Great Moor, and Heaton Norris, where certain schools had to be closed.

BIRTHS.

(Visits to houses at which births have been registered).

This important work has been carried out fully this year ; 1,223 infants have been visited, and many revisits have been made to the delicate and improperly fed children, until an improvement has been seen. The following figures, worked out on lines suggested by the Medical Officer of Health, show the difference between the wholly breast-fed, partially breast-fed, and artificially-fed children.

	Healthy.	Delicate.	Total.
Breast-fed :—	646	47	693
or :—	93·2%	6·8%	
Partially :—	43	19	62
or :—	69·3%	30·7%	
Artificially :—	112	143	255
or :—	43·9%	56·1%	

The second half of the year shows a marked increase in the number of breast-fed infants. This is probably due to the bad trade ; the mothers have no work to go to, so they are able to look after the children themselves, instead of paying 2s. 6d. or 3s. per week to some old woman who will, in nine cases out of ten, either over feed the child, or give it improper food.

DEATHS FROM DIARRHŒA.

Sixty-one deaths from diarrhœa have been visited this year and full inquiries made into the circumstances attending the death, the particulars of inquiry having been drafted by the Medical Officer of Health ; only two of these infants were fed entirely on the breast. In one case the mother had to work at fruit-picking, and left the child in the care of an old woman ; the other child was delicate from birth, and died when one month old. It is a very noticeable fact this year, that many of the children who died from diarrhœa had been fed on condensed milk.

INFANT HYGIENE LECTURES.

These have been given to the upper girls' classes at the elementary schools. Two of the evening schools have also been visited and lectures given to the young women, who appeared to be very interested. An examination on the subjects of the lectures has been held at each school, and many of the examination papers were excellent, showing that the girls have a thorough knowledge of the proper and improper methods of feeding and of the care of infants generally. Thirty-five lectures in all have been given.

The infant hygiene lessons are usually given to the three top classes of the school ; thus, the girls who pass through all the standards have three years' tuition in the subject.

ADVICE TO MOTHERS ON INFANT FEEDING.

We still occasionally come across the abominable long-tube feeding bottle, but we hope soon to stamp this out altogether. The ignorance shown by some mothers in feeding young infants is deplorable. On one occasion we found a baby, two weeks old, being fed on boiled bread ; another baby, seven weeks old, was being fed on sago pudding, and we very often find, on visiting the babies of three or four months of age that five or six patent foods have been tried. A great deal of time is spent in trying to persuade the mothers to see that milk is the proper food for a baby under six months. Very often a second visit to a house where a child has been improperly fed will show that the child has improved wonderfully under proper treatment, and that the mother is usually very grateful for the advice given.

One child, fed on a patent food from birth, was very puny and apparently wasting away. The mother was persuaded to try cow's milk (sterilised) and barley-water, and the child altered almost miraculously in a very short time ; this child is now one of our bonniest babies.

OVERCROWDING.

The cases of overcrowding are not so numerous this year, there being only 16, and these were abated in each case in less than a week. The following are the worst cases :—

1. **37, Back Water Street.** Occupied by two families, six in each family, only two beds in the house, and these were in a filthy state. One family moved out the same day.

2. **14, Barr's Court** (single house). Six in the family, consisting of father, mother, two grown-up sons, and two daughters, youngest 17.

3. **184a, Old Road** (single house). Eight sleeping in one room.

4. **14, Emily Street.** Two families, five persons in one bed, six in another.

5. **47, Weston Street.** Bed in the living room, in which slept the father, mother, and four children. In this case, the tenant was persuaded to take the bed upstairs, and they now have another bed, and appear to be quite clean and comfortable.

Cases such as these require constant supervision to ensure the improvement being maintained.

INSPECTION OF INFANT SCHOOLS.

Monthly visits are made to the various schools for the purpose of inspecting the children, any dirty or neglected-looking children being visited at their homes, and the very bad cases reported to the N.S.P.C.C. By these inspections many cases of ringworm, sore and verminous heads are discovered.

POLICE-AIDED CLOTHING ASSOCIATION.

A great many deserving cases have been reported for help ; most of the children have been so poorly clothed that they were unable to attend school.

We are constantly asked for articles of clothing for the children. Owing to bad trade many of the parents have earned so little that they could not spend much on clothing.

RECORD OF VISITS, &c., OF FEMALE SANITARY INSPECTORS.

	Mrs. F.		Miss J.		Total.
Inspections.....	214	.....	378	.....	592
Visits	2,163	.....	1,854	.....	4,017
Repairs	26	.....	44	.....	70
Infectious Disease	347	.....	237	.....	584
Informal Notices	50	.....	101	.....	151
Reported to Inspectors...	24	.....	18	.....	42
Cellar Dwellings	65	.....	7	.....	72
Schools	82	.....	62	.....	144
Workshops.....	33	.....	31	.....	64
Outworkers	62	.....	80	.....	142
Lectures	35	.....	—	.....	35
Overcrowding Abated ...	6	.....	10	.....	16
Accumulations Removed	9	.....	8	.....	17
Houses Cleansed	69	.....	71	.....	140
Births	723	.....	500	.....	1,223
Diarrhoea Deaths	34	.....	27	.....	61
Revisits	610	.....	447	.....	1,057

The foregoing report speaks for itself, and shows that Female Inspectors can take up and deal with matters of supreme importance to the public health and the welfare of the community—matters, moreover, in which the inter-

ference of "mere man" would most probably be strongly resented or entirely misinterpreted. Your Female Inspectors have found it an immense aid in their work that they are formally and legally appointed "Inspectors of Nuisances," and can enforce most of their requests, if need be, by appeal to your Committee. Their appointment is unquestionably one of the most justifiable steps ever taken by your Committee.

Legal Proceedings.

The subjoined statement shows the cases in which it has been necessary for the Department to resort to law to impress certain lessons upon wrongdoers. Most of the cases which are marked "withdrawn" were those in which two informations were laid for similar offences, or where informations were laid against two persons who were both implicated in the committal of the same offence; where a conviction has been obtained in the first summons and justice has been amply served, the second summons has usually been withdrawn with the consent of the Bench.

LEGAL PROCEEDINGS DURING THE YEAR 1903.

OFFENCE.	RESULT.	AMOUNT OF FINES, &c.,
		£ s. d.
Selling adulterated milk	Convicted.	15 0 0 and costs and advocate's and analyst's fee.
Do. do.	do.	10 0 0 and special costs.
Do. do.	do.	2 0 0 and costs and advocate's and analyst's fee.
Do. do.	do.	0 10 0 do.
Do. do.	do.	0 10 0 and costs and analyst's fee.
Do. do.	do.	0 10 0 do.
Do. jam	do.	0 5 0 and costs and advocate's and analyst's fee.
Do. do.	do.	Costs and analyst's fee.
Do. do.	Withdrawn	
{ Selling margarine for butter }	Convicted	20 0 0 and costs or 2 months.
{ Do. do. }	Withdrawn	
{ Selling margarine not properly labelled	do.	
{ Do. do. }	do.	
{ Selling margarine for butter }	Convicted	2 0 0 and costs and analyst's fee or 1 month.
{ Selling margarine not properly labelled	Withdrawn	

OFFENCE.	RESULT.	AMOUNT OF FINES, &c.
{ Selling adulterated quinine wine	Dismissed under war-ranty section	
Do. do.	do.	
{ Giving false warranty with quinine wire	Convicted	2 0 0 and special costs.
{ Giving false label with quinine wine	Withdrawn	Costs.
{ Exposing unsound meat for sale	Convicted	2 0 0 and costs and advo-cate's and veterinary surgeon's fee.
{ Do. do.	Withdrawn	
Wilfully exposing himself whilst suffering from smallpox ...	Convicted	5 0 0 and costs or 1 month.
Do. do. ..	do.	5 0 0 do.
Do. do. ..	do.	5 0 0 do.
Do. scarlet fever	do.	0 2 6 and costs or 7 days.
Non-compliance of notice to repair drains, pave yard, and demolish privy-midden	Withdrawn	Costs.
Emitting black smoke from mill chimney	Convicted	5 0 0 and costs.
Do. do.	do.	Costs and order made to abate
Do. do.	do.	do. do.
Do. do.	do.	do. do.
Do. do.	do.	do. do.
Do. do.	do	do. do.
Do. do.	Order made to abate	
Do. do.	do.	

Factory and Workshops Act, 1901.

Under the provisions of the 1901 Act it is now necessary to report specially on the administration of the Act in workshops and workplaces, and to forward a copy of the report containing such account to the Secretary of State.

The Special Inspector appointed by your Committee (Inspector Blllingham) has done some excellent work in bringing up to a proper sanitary standard a number of factories, workshops, workplaces, and bakehouses which were not

quite satisfactory. A number of intimations have been received from H.M. Inspector of Factories, and these have all been dealt with as promptly as circumstances would allow.

FACTORIES.

There have been 89 visits paid to factories, special regard being paid to the question of closet accommodation. In the case of one factory a stack of seven closets, which had to be flushed by buckets of water, have now had cisterns fixed to each closet. A block of six new water-closets have been erected at another mill where the accommodation was not sufficient, and in three other cases four additional water-closets have been provided. Your Borough Surveyor has paid special attention to the question of fire escape provision in factories.

The following is the text of the order regulating the provision of sanitary conveniences in factories and workshops etc.

SANITARY ACCOMMODATION ORDER.

1. In factories or workshops where females are employed or in attendance there shall be one sanitary convenience for every 25 females. In factories or workshops where males are employed or in attendance there shall be one sanitary convenience for every 25 males ; provided that—

- (a) in factories or workshops where the number of males employed or in attendance exceeds 100, and sufficient urinal accommodation is also provided, it shall be sufficient if there is one sanitary convenience for every 25 males up to the first 100, and one for every 40 after ;
- (b) in factories or workshops where the number of males employed or in attendance exceeds 500, and the District Inspector of Factories certifies in writing that by means of a check system, or otherwise, proper supervision and control in regard to the use of the conveniences are exercised by officers especially appointed for that purpose, it shall be sufficient if one sanitary convenience is provided for every 60 males, in addition to sufficient urinal accommodation. Any certificate given by an Inspector shall be kept attached to the general register, and shall be liable at any time to be revoked by notice in writing from the Inspector.

In calculating the number of conveniences required by this order, any odd number of persons less than 25, 40, or 60, as the case may be, shall be reckoned as 25, 40, or 60.

2. Every sanitary convenience shall be kept in a cleanly state, shall be sufficiently ventilated and lighted, and shall not communicate with any work-room except through the open air or through an intervening ventilated space ; provided that in work-rooms in use prior to 1st January, 1903, and mechanically ventilated in such a manner that air cannot be drawn into the work-room through the sanitary convenience, an intervening ventilated space shall not be required.

3. Every sanitary convenience shall be under cover and so partitioned off as to secure privacy, and if for the use of females shall have a proper door and fastenings.

4. The sanitary conveniences in a factory or workshop shall be so arranged and maintained as to be conveniently accessible to all persons employed therein at all times during their employment.

5. Where persons of both sexes are employed the conveniences for each sex shall be so placed or so screened that the interior shall not be visible, even when the door of any convenience is open, from any place where persons of the other sex have to work or pass ; and, if the conveniences for one sex adjoin those of the other sex, the approaches shall be separate.

WORKSHOPS AND WORKPLACES.

No less than 1,006 visits of inspection have been paid to these places, and a large number of structural alterations connected with ventilation, cleansing and limewashing, drainage, effluvia, etc., carried through. No legal proceedings have been requisite further than the service of an occasional notice.

The following is a list of the workshops, &c., in the Borough :—

Coopers	3
Dressmakers	145
Milliners	38
Boxmakers	3
Shirtmakers	9
Tailors	57
Paper bag makers.....	5
Shoemakers	61
Cloggers	19
Tinplate workers	14
Blacksmiths	25
Brushmakers	7
Coachmakers	4
Saddlers	14
Joiners	34
Waste dealers	7
Wheelwrights	8
File cutters.....	2
Skipmakers	6
Cycle makers.....	3
Lath cutter.....	1
Cabinetmakers	19
Hat body makers	14
Organ builders	2
Straw hat maker	1
Blindmakers	6
Feather curlers	2

Printers	13
Polishers.....	2
Curriers	2
Rope makers	5
Handloom weavers	11
Bakers and confectioners.....	86
Dyers and cleaners ...	4

BAKEHOUSES.

In all 814 visits have been made to bakehouses and confectioners' shops. In the case of the latter there has been found but little requiring attention. In the case of bakehouses those wholly or partially underground came under special legislation during the year, and a considerable amount of work was entailed in bringing them up to statutory requirements. There were in 1903 14 underground bakehouses in the Borough, and your Medical Officer of Health in view of the importance of the question alike to the Sanitary Authority and to trade interests visited the whole of these on several occasions, and in reporting on these visits recommended your committee to adopt the following regulations, a recommendation which was at once adopted. The regulations were as follows :—

A.—CONSTRUCTION.

1. No underground bakehouse shall be less than 8 feet in height throughout, measured from the floor vertically to the ceiling ; and in case the floor area exceeds 300 square feet, such height shall be at least 8 feet 6 inches.

2. No underground bakehouse shall have a cubic capacity, clear of the oven, of less than 1,500 feet.

3. The floor shall be constructed of hard, smooth, durable, and impervious material.

4. The walls shall be constructed of a material which is hard, smooth, durable, and impermeable to damp.

[*Note.*—Where adjacent ground abuts on a wall, or walls, such walls should be lined with the best glazed bricks, uniformly joined with Portland cement, to form internal walls, separated from the existing walls by a cavity, and bonded to them, the intervening space being ventilated to the outer air.]

5. The ceiling shall be even, impermeable to damp and dust, and durable.

6. Every underground bakehouse shall be approached by a suitable staircase, adequately lighted and ventilated.

No outside staircase shall terminate within an underground bakehouse.

Any opening into the shop above must be so covered as to prevent the entrance of dust.

B.—LIGHT.

7. The underground bakehouse shall be adequately lighted with daylight throughout, to the satisfaction of the Sanitary Committee, or their authorised officials, and the lighting maintained shall be such that an Official Copy of the Abstract of the Factory Act may ordinarily be read in all parts of such bakehouse, between the hours of 11 a.m. and 3 p.m.

C.—VENTILATION.

8. Ventilation should be so arranged that the circulation of air is confined to the underground bakehouse.

9. Ventilation shall be adequate, that is to say, fresh clean air shall be supplied constantly during working hours, so as to provide not less than 3,000 cubic feet of air, per hour, for each person employed, with any additional amount required for purposes of combustion, in such a manner as to avoid the occurrence of draught, and so that the air is sufficiently renewed in all parts of the underground bakehouse; and, by the aid of mechanical power, where, in the opinion of the Medical Officer of Health, such is necessary.

Provisions shall be made for the removal of steam from the underground bakehouse.

Where mechanical power is used the fresh air shall be taken from a height above the level of the adjoining ground of not less than 6 feet, and be distributed to different parts of the underground bakehouse in such a manner as to change the air of such bakehouse in all parts.

[*Note.*—This will generally require the provision of a fan. Foul air may also be extracted by means of a fan with any aid available from gas and ventilating shafts.]

10. Arrangements for ventilation shall be such that the temperature of the underground bakehouse from October 1st to May 31st, shall not exceed 80 deg. Fahr., except within half-an-hour after a batch of bread has been drawn.

D.—ALL OTHER RESPECTS.

11. Proper provision shall be made for the storage of flour elsewhere than in the underground bakehouse itself.

12. There shall be no opening into the underground bakehouse for any purpose which will tend unduly to the admission of dust from the adjoining street.

13. Conveniences for personal ablution shall be provided in a suitable position, and shall include a water tap, and a sink or lavatory basin of an approved character.

[*Notz.*—These conveniences shall be outside the underground bakehouse.]

Free access shall be provided to suitable sanitary conveniences suitably situated.

14. All troughs, tables, or other furniture standing on the floor of the underground bakehouse, shall be provided with strong ball-bearing castors.

15. Proper provision shall be made for the depositing of wearing apparel outside the underground bakehouse.

16. An underground bakehouse shall not be in communication with a wash-house, nor with any room, cellar, or area containing objectionable materials.

17. An underground room, not entirely separated from the underground bakehouse shall be well lighted throughout, shall be sufficiently protected against the entrance of ground air, shall be properly ventilated, and shall be at all times clean.

18. All statutory obligations shall be fulfilled.

19. Before making any alterations with a view to meeting these requirements, the owners or occupiers of underground bakehouses shall submit to the Sanitary Committee a specification (and plans) of the alterations which they purpose making.

APPENDIX.

GENERAL STATUTORY REQUIREMENTS.

A.—ALL BAKEHOUSES.

- (1) Every room or place used as a bakehouse shall be in such a state as to be, on sanitary grounds, fit for use or occupation as a bakehouse.
- (2) No water-closet, earth closet, privy, or ashpit shall be within, or communicate directly with, the bakehouse.
- (3) Every cistern for supplying water to the bakehouse shall be separate and distinct from any cistern for supplying water to a water-closet.
- (4) No drain or pipe for carrying off fœcal or sewage matter shall have an opening within the bakehouse.
- (5) All the inside walls of the rooms of a bakehouse, and all the ceilings or tops of those rooms (whether those walls, ceilings, or tops are plastered or not), and all the passages and staircases of a bakehouse, shall be either painted with oil or varnished, or be lime-washed, or be partly painted or varnished and partly limewashed ; and

- (a) Where the bakehouse is painted with oil or varnished, there must be three coats of paint or varnish, and the paint or varnish must be renewed once at least in every seven years, and must be washed with hot water and soap once at least in six months ; and
 - (b) Where the bakehouse is limewashed the limewashing must be renewed once at least in every six months.
- (6) No place on the same level with a bakehouse, and forming part of the same building, shall be used as a sleeping place, unless it is constructed as follows, that is to say :—
- (a) is effectually separated from the bakehouse by a partition extending from the floor to the ceiling ; and
 - (b) has an external glazed window of at least nine superficial feet in area, of which, at the least, four and a half superficial feet are made to open for ventilation ;

and unless such sleeping room (if separately occupied) comply with the requirements as to cellar dwellings or underground rooms (so occupied), laid down in the Public Health Acts.

B. —UNDERGROUND BAKEHOUSES.

- (1) An underground bakehouse shall not be used as a bakehouse unless it was so used at the passing of the Factory and Workshop Act, 1901 (i.e., August 17th, 1901).
- (2) After January 1st, 1904, an underground bakehouse shall not be used, unless certified by the District Council to be suitable for that purpose ; and an underground bakehouse shall not be certified as suitable unless the District Council is satisfied that it is suitable as regards construction, light, ventilation, and in all other respects.

These regulations were sent out to all persons concerned in February, 1903, thus allowing ten months for the carrying out of all requisite alterations before the time limit fixed by the 1901 Act expired. The provisions of the Act were duly advertised in all the local papers on two occasions, and yet hardly a single bakehouse proprietor thought it advisable to commence alterations until well towards the end of the year.

Five of the underground bakehouses had to be closed as being incapable of alteration ; in the case of the remainder it required a considerable expenditure of time to scheme out the best mode of adapting the premises to meet the requirements of the regulations. Your Borough Surveyor very kindly rendered valuable assistance in several cases.

OUTWORKERS.

The requirements of the 1901 Act have been duly advertised in

the local papers on several occasions, and the lists continue to be fairly regularly received, especially from the larger firms. But the smaller firms are frequently most negligent, and it became a question with your Committee whether or not a prosecution should not be undertaken in several cases. However, a strongly-worded circular letter produced the desired effect.

The premises occupied by the male outworkers are periodically visited by your District Inspectors, and those occupied by the female outworkers by the two Lady Inspectors. The latter comprise chiefly hat trimmers and fur-pullers ; the houses of the former are usually as clean and wholesome as can be desired, but those of the fur-pullers (who are few in number and who all reside in Rosemary Lane) leave much to be desired, especially in the matter of ventilation. I have personally found the atmosphere in some of the rooms used by fur-pullers to be almost irrespirable.

The following visits and re-visits have been paid to outworkers :—

Male	52
Female	142

The various classes of work done by outworkers is shown in the following statement :—

FEMALE OUT-WORKERS.		MALE OUT-WORKERS.	
Nature of Work.	Number.	Nature of Work.	Number.
Hat Trimming	94	Planking.....	26
Skirt Making	11	Boot and Shoe Repairing ...	2
Tailoring	9	Shoemaking	3
Fur Pulling.....	5	Outfitting	1
Underclothing	1		
Pinafore Making	1		

The following is the form of inquiry I have drawn up for use by your Inspectors in visiting outworkers. The information is all entered up in two separate registers, one for males and one for females :—

OUTWORKERS.

NameAge.....
Address.....
By whom employed
Nature of employment
Room used for working purposes
Is it used for any other purpose ?
If so, what ?.....
Size of room—L..... B.....H.....

Total floor space.....		Cub. space.....
Means of	{	Ventilation
		Warming
		Lighting
Cleanliness of	{	Floor
		Walls
		Ceiling
		Furniture
General sanitary condition of premises		
Any infectious disease recently.....		
Health of workers		
Remarks		
.....		
.....		
.....		
Inspector's Initials.....		

Sale of Food and Drugs Acts.

The work of taking samples for analysis, etc., under the above Acts has been regularly carried out during the year. An improvement in the quality of the samples taken is undoubtedly visible, the explanation of which may be found in the facts (1) that the sampling is done systematically, and (2) that in one or two cases taken before the magistrates, where the cases have been adequately proved, substantial penalties have been imposed.

No less than 312 official samples were submitted to your Public Analyst during the year, and the results of analysis of the same and subsequent procedure will be found in the appended table.

More samples of milk were taken than of any other article of food, and again the percentage of adulteration was higher than in the case of other samples, though smaller than in previous years.

A note of one or two unusual cases may be of interest.

A prosecution was undertaken against a farmer for selling milk containing 24 per cent. of added water. As there was conflicting evidence brought by the defence regarding the analysis, the Court ordered the third part to be sent to Somerset House, and in due course their certificate was received and was found to confirm that of your Public Analyst. It was subsequently shown that the defendant's portion of the sample had been tampered with, and this being the second offence within a few weeks, a fine of £10 and costs was imposed.

Another prosecution was taken against a farmer for selling milk containing 8·5 per cent. of added water, and as he was shown to be an old offender he was fined £15 and costs.

Samples of milk have been taken "in course of delivery" from the various

public institutions (including your Committee's Hospitals) and at the various railway stations and practically without exception samples have been taken during the year from every source of milk supply in the Borough.

Several summonses were issued against a firm of Irishmen, who had only been in the town a few weeks, for selling margarine as butter. At the hearing the defendants put in a certificate from a Public Analyst stating that the sample he had analysed was "pure butter." The Court sent the third portion of the sample to Somerset House, and the case was adjourned *sine die* pending the receipt of their report. A certificate was received from Somerset House in due course confirming that of your Public Analyst, viz., that the sample consisted of 100 per cent. margarine. The day before the hearing the three defendants concerned absconded, leaving behind the little stock they had, and they have not since been heard of. This is a not uncommon thing in this and other towns, and so far legislation seems to have little effect on the scamps who perpetrate these frauds.

Your Inspector had been to considerable trouble to bring evidence of previous convictions at the adjourned hearing, from various parts of the country, but since the defendants were not present the case could only be dealt with as a first offence, and a fine of £20 and costs was imposed, certain other cases against the same firm being withdrawn.

Another case arising out of this was taken, and the defendant fined 40s. and costs. The defendants in the first case, who were wholesale dealers, had supplied the same "butter" to the second defendant.

Samples of "bread and butter" were taken from several of the restaurants and eating houses in the town and certified genuine.

Several important prosecutions were taken for selling jam containing salicylic acid, and a conviction was obtained in each case.

In one case an appeal was made to Quarter Sessions, and after a prolonged hearing of professional and expert evidence on both sides the Court upheld the conviction with costs. A case was then stated for the High Court, and due notice of appeal given, but this was afterwards withdrawn.

Seeing there is no standard for jam, and the recommendations of the Departmental Committee on Food Preservatives are only recommendations, it is rather unfortunate, perhaps, that the case was not proceeded with and settled, as there does not appear to be a decision of the High Court on the use of salicylic acid in the manufacture of jam. The following is a resume of the case as reported in the "Grocer":—

THE SALE OF FOOD ACTS.

SALICYLIC ACID IN JAM: AN APPEAL CASE.

At Cheshire Quarter Sessions, held at Knutsford, on Monday, Sir Horatio Lloyd presided over a large Bench of magistrates, who adjudicated in an appeal by Thomas Chandler, grocer, of Stockport, against a conviction of the

Stockport magistrates for selling to the prejudice of the purchaser a pound pot of jam which was not of the nature, substance, and quality demanded. Mr. Colt Williams appeared for the respondent justices, and Mr. Trevor Lloyd for the appellant. Mr. Colt Williams stated that the jam in question contained 2·6 grains of salicylic acid per pot. This was a matter of great importance, not only to the trade but to the public at large., because when a person bought jam he believed he was buying an article which was commonly known as, and supposed to be, jam. Most of them thought that jam was composed of fruit and sugar, and, he presumed, a certain amount of added water, and when they asked for jam they did not want jam to which had been added such an extraneous substance as salicylic acid. The first point was that salicylic acid was not required for the preservation of jam which was made for sale in England. He suggested that the reason why salicylic acid was added was to mask the presence of bad fruit and to enable the maker to use less sugar and add more water. The result was that a man making a pound of jam with this added acid could make it cheaper, and could make a bigger profit. There was a difference of 9 per cent. of added water to each pot of jam. In the second place the acid in such quantity was injurious to health. Salicylic acid was used in the preservation of other things, and a person eating jam thus impregnated was eating a deleterious and dangerous drug.

Mr. William Thompson, public analyst for the Borough of Stockport, stated that a pound pot of gooseberry and raspberry jam was submitted to him for analysis. The jam contained 2·6 grains of salicylic acid to the pound. It contained of cane sugar 23·6 per cent., of invert sugar 38·0 per cent., of other sugars, 11·5 per cent., of water 23·3 per cent, and of insoluble matter from fruit 3·6 per cent. He tested another jam, which contained no salicylic acid, and it showed 73·1 grains of sugar against 23·3 of water, whereas the first sample with salicylic acid contained 63·7 grains of sugar and 32·9 of water. Salicylic acid was not necessary for the making or preservation of jam. In cross-examination witness adhered to his opinion that salicylic acid was not necessary at all. He knew that this jam was kept in pots and sold by retailers, and that it was kept open in pots, but he did not agree with the idea that it should have in it salicylic acid. He did not think that 2·6 grains of salicylic acid in a pound would do an average man any harm, but he admitted that on other occasions he had given evidence as to the preservative qualities of salicylic acid in the keeping of cherry brandy. Of course, a great deal depended on the quality of the spirit in the first instance. He declined, however, to give an opinion as to whether 2 grains of salicylic acid in a pound of jam would be harmless or not in any circumstances.

Professor Delepine, Director of the Public Laboratory, Victoria University, Manchester, said that salicylic acid was quite unnecessary for the preservation of jam. If there was too much water in jam, something else than sugar was required to counteract it. Salicylic acid was a powerful poison, and the continuous taking of minute doses would be injurious to children or weak persons.

Dr. Meredith Young, Medical Officer of the Borough of Stockport, stated that he would not say that the amount of acid in the jam would be injurious to an ordinary healthy individual, but there were a very large number of

people in the world with damaged kidneys, livers, and digestions, and in that case it would be injurious. He gave results of observations of pure acid upon a child, where small doses had been found to be dangerous. Jam would keep, if properly made, for twelve months or more, without preservatives.

Dr. Vacher, Medical Officer of Health for Cheshire, corroborated previous evidence, and said that he considered salicylic acid in the preparation of jam injurious to health. Cross-examined, he said that this preserve was liable to attract bacteria, unless properly made and properly covered.

Mr. Thomas Pink, sole proprietor of the firm of Messrs. E. and T. Pink, Staple Street, London, S.E., who attended on subpoena, said he had had thirty years' practical experience in the manufacture of jam. Their output exceeded 10,000 tons of jam and marmalade per year, and was entirely made without any admixture of salicylic acid. In his opinion, it was not necessary. It was used to mask the presence of stale or badly decayed or bad fruit.

Mr. John Hetherington, manager of the firm of Messrs. Batger and Co., of London, also said that they did not use any preservative in the manufacture of their jams and he generally corroborated the evidence of the last witness in this respect.

Mr. Trevor Lloyd, for the appellant, said this case was not only of the utmost importance to the trade, but also to the consumer. There was no agitation until the matter had been taken up by Parliament. But the report of the Parliamentary Committee was not the law of the land, although they recommended that only one grain per pound should be used generally. There was considerable difference amongst the scientific gentlemen who gave evidence as to whether the admixture of salicylic acids in jams would be injurious or not. He quoted cases to show that this could not be to the prejudice of the customer, inasmuch as it would not be injurious to the person partaking of it. He considered it had not been shown that anybody had suffered from eating jam containing this salicylic acid, and that it had not been proved that this jam had been sold to the prejudice of the purchaser.

Mr. John Greenhalgh, managing director of the firm of Greenhalgh and Co., Reddish, Stockport, said that his firm had manufactured for upwards of 46 years, and their jams had been repeatedly analysed. This was the first prosecution they had ever had. For the past 25 years they had used salicylic acid in their jam, but this was not to conceal inferior qualities of fruit. Salicylic acid was used for the prevention of mould or mildew, and for the prevention of fermentation. They used the best chemically pure salicylic acid they could buy. They did not use pulp in the manufacture of their jam, for if they used pulp they did not get the quality. They sold jam in large jars to retailers, who in turn sold it to people who came for a pennyworth or two-pennyworth in a cup or a saucer, and unless care was taken fermentation set in. It was difficult to prepare jam which would keep without the use of acid. If fruit was bad they could not make it good by the use of a preservative. In cross-examination he said they paid 11d. per pound for the acid, and it was the most expensive item, weight for weight, in the preserve. Their output was 800 to 1,000 tons per year. He contended that there must be salicylic

acid in it to preserve the fruit. It did prevent mildew to some extent, but that all depended on the conditions under which the jam was kept---whether the premises were damp or hot. There was also a difference in the quantity of water contained in various fruits.

Mr. Ernest Lodge Newsome, a director of Newsome and Co., Limited, Preston, stated that for the last 11 years they had used salicylic acid in the manufacture of jams, but he held that it was not to hide any inferior quality of fruit or for the purpose of increasing the bulk. The jam would keep longer with the acid added. Cross-examined, he said that jam could be made without salicylic acid, but it certainly would not keep as long as with the preservative. Their output was 800 or 900 tons per annum. They put $1\frac{1}{4}$ grains to the pound, but they put this so low to avoid prosecution.

Mr. William Robert Deakin, fruit preserver, Wigan, who had had 20 years' experience in the manufacture of jam, said they used salicylic acid for the preserving of the jam and to prevent mould and fermentation, but for no other purpose. To prohibit the use would, he considered, injure both the trade and the consumer. Cross-examined: Jam, in his opinion, would not keep a satisfactory time if they did not use salicylic acid. Their output was about 2,000 tons per annum. They used 2 grains per pound, but when the scare arose he got a certificate from an eminent firm of analysts in Liverpool, who stated that his jams were absolutely pure. They did not, however, say whether there was any acid in them or not. (Laughter.)

Mr. John Hudson, fruit preserver, Leeds, said that intermittently he had used salicylic acid for his jam for the last 20 years, but only for the purpose of lessening the risk of mildew. Cross-examined: His output was about 800 tons per annum, and was for home consumption. He supplied preserves during the time of the Boer War, but did not tender afterwards, when the War Office prohibited the use of the acid. He generally confirmed the evidence of the previous witnesses as to the necessity for using the acid.

Mr. Thomas Holgate, managing director of Holgate, Limited, Leeds, corroborated. At first he declined to answer as to how many tons per annum they turned out, but stated it was over 1,000. They used 0.8 per cent. of salicylic acid, but if they could have their way they would use double that quantity.

Mr. Herbert Edward Davies, analytical chemist, Liverpool, said he had had considerable experience in the use of preservatives in jam, and, in his opinion, to make jam keep a certain time they must use some preservative, otherwise there was a risk of a certain proportion going mouldy. Of the preservatives, he thought salicylic acid was the best. Salicylic acid had been used in jam at his recommendation. In cross-examination, he gave it as his opinion that, even where jam was made under the best of conditions, with good fruit and sugar, a certain proportion would go mouldy after a certain time. He had advised jam manufacturers who had consulted him to use a certain amount as a preservative.

Dr. Thomas Robert Bradshaw spoke of the preservative effect of salicylic acid in jam, and said that 2.6 grains per pound would not, in his opinion, be

in the least injurious. He had taken it himself, and said that the supposed evil result from the use of salicylic acid was a purely hypothetical fancy. In cross-examination, he said the main point in regard to the whole case was that salicylic acid, as used by Messrs. Greenhalgh, was not harmful.

Dr. Rayner, formerly Medical Officer of Health for Stockport, said jam was all the better for having mixed with it a small proportion of salicylic acid, which acted as a preservative. In reply to counsel for the respondents, he said that he did not anticipate any evil effects from the use of such a small quantity of salicylic acid in jam.

Sir Horatio Lloyd, Chairman of the Court, said that the main question they had to decide was whether this article was of the nature, substance, and quality demanded. That was the foundation-stone of the whole case. They could not say, however, when a customer asked for jam, it was giving him an article of the substance, quality, and nature demanded if they gave him jam plus acid. This did not comply with the terms of the statute. In regard to its being to the prejudice of the purchaser, they were more or less influenced by the fact that in working-class districts it was the staple food of children, and even in small doses, frequently repeated, they could not but feel that this would be injurious to them. Although the result of the Parliamentary Inquiry had not been placed on the Statute Book, they were bound to pay some attention to the recommendation that it was not safe to allow more than one grain in a pound of jam. They found on all the points mentioned against the appellant, and the decision of the magistrates would be confirmed, with costs.

Mr. Trevor Lloyd applied for a case to be stated.

In two cases prosecutions were taken for selling quinine wine which was not in accordance with the British Pharmacopœia standard, the samples containing only 10 and 16·7 grains per pint of quinine hydrochloride respectively instead of 20 grains as officially prescribed. Due notice was given (as required by the Act) by the defendants that they would rely upon a warranty for their defence, and this the Court considered good, and dismissed the cases on those grounds, granting two fresh summonses against the manufacturers, one for false warranty and one for false label. Only one case was proceeded with, namely, that for false warranty, and a fine of 40s. and special costs was imposed.

Tradesmen appear to be more alive to the necessity of buying with a warranty than formerly, and since this is one of the channels through which we can deal directly with manufacturers, it should be a long way to stamp out adulteration practices.

It would assist retailers very considerably if a Government form of warranty, drafted in such a form that the ordinary mind could grasp its import, were made compulsory. Very few people fully understand the meaning of "percentages," and, moreover, it is a common practice amongst manufacturers and wholesale dealers to draft an ingenious warranty which, whilst safeguarding themselves, utterly misleads the retailers, and thus leaves neither party open to direct attack.

A prosecution was taken against a milk purveyor for selling milk containing not less than one part in 100,000 of formaldehyde, a most insidious preservative. The Presiding Magistrate expressed himself strongly against the practice, and a fine of 10s. and costs was imposed.

In one or two cases where impure drugs were supplied, and yet it was questionable whether a prosecution would succeed, the safer course was adopted of sending cautionary letters to the vendors.

In another case a chemist supplied flowers of sulphur for milk of sulphur, and your Committee, seeing the probability that it was done in error by the salesman, withdrew the case on payment of £2 2s. costs by the person concerned.

During the year nine cases of adulteration of pepper by ground olive stones were discovered, and it was found that all samples originated from one source, although they had not all been supplied by the same wholesale dealer. Your Committee authorised me to deal direct with the manufacturers, who agreed to call in all the adulterated pepper, pay the analyst's fee, together with one guinea advocate's fee in each case.

There were no applications received from wholesale margarine dealers during the year for registration, and there are now 20 names on the register.

In seven cases during the year preliminary notices were served on milk purveyors under Section 9 of the Sale of Food and Drugs Act, 1899, for not having their name inscribed on the vehicle or can when selling milk in a public place. All were immediately complied with, and therefore no further steps were necessary.

The following is a statement showing the samples analysed, the results of analysis, and the subsequent proceedings. It will be seen that 312 samples were analysed, and of this number 39, or 12·5 per cent., were found to be adulterated.

SALE OF FOOD AND DRUGS ACT, 1875.—Report of the Public Analyst appointed for the Borough of Stockport upon the Articles analysed by him under the above Act during the Quarter ending the 31st March, 1903.

Articles submitted for Analysis.	No. of Samples.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis; showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	The sum paid in respect of the Analysis.	Observations.
Milk.....	49	All submitted by Sanitary Inspector.	Milk, genuine 45; adulterated 4. Two had fat abstracted 14·7 and 10 per cent. One contained added water 10·5 per cent. One contained formaldehyde 1 in 100,000 parts.	10/6 per sample.	Fines: £15; 10/-; 10/-; 40/-
Butter	14		} All Genuine.		
Coffee	12				
Pepper.....	6				
Arrowroot	2				
Ground Ginger	2				
Baking Powder	2				
Liquorice Powder ...	2				
Whisky	3				
Rum.....	3				
Brandy	4				
Gin	2				
Beer.....	10				

Total Number of Samples analysed during the Quarter, 111.
Total Number of Samples adulterated, 4.

WILLIAM THOMSON, Public Analyst.

SALE OF FOOD AND DRUGS ACT, 1875.—Report of the Public Analyst appointed for the Borough of Stockport upon the Articles analysed by him under the above Act during the Quarter ending the 30th June, 1903.

Articles submitted for Analysis.	No. of Samples.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis; showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	The sum paid in respect of the Analysis.	Observations.
Milk	7	All submitted by Sanitary Inspector.	Milk } Butter } All genuine. Margarine } Lard }	10/6 per sample.	No prosecutions instituted. Vendors paid costs in each case.
Pepper.....	14		Pepper, genuine 11; adulterated 3. Adulterant, ground olive stones 8.0, 4.0, 4.0, per cent.		No prosecutions instituted.
Jam.....	6		Jam, genuine 3; Adulterated 3. Adulterant, salicylic acid 3.0, 2.9, 2.4 grs. per pound.		No prosecutions instituted.
Whisky	3		Whisky } Rum } All genuine. Gin }		No prosecution.
Vinegar	8		Vinegar, genuine 7; adulterated 1. Dilute acetic acid coloured.		No prosecution.
Borax	2		Borax, both adulterated. Arsenic 1/9th and 1/10th grs. arsenic trioxide per pound.		Cautioned. No prosecutions.
Boracic Acid	2		Boracic acid, genuine 1; adulterated 1. Sodium Bicarbonate substituted for Boracic acid.		Cautioned. No prosecution.
Cream of Tartar ...	2		Cream of tartar, both genuine		

Total Number of Samples analysed during the Quarter, 63.
Total Number of Samples adulterated. 10.

WILLIAM THOMSON, Public Analyst.

SALE OF FOOD AND DRUGS ACT, 1875.—Report of the Public Analyst appointed for the Borough of Stockport upon the Articles analysed by him under the above Act during the Quarter ending the 30th September, 1903.

Articles submitted for Analysis.	No. of Samples.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis; showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	The sum paid in respect of the Analysis.	Observations.
Milk.....	1	All submitted by Sanitary Inspector.	Milk, genuine 1; adulterated 0.	10/6 per sample.	£20; 40s.
Butter	2		Butter, both adulterated, 100 per cent Margarine in each case.		No prosecutions. Vendors paid costs.
Pepper	19		Pepper, genuine 12; adulterated 7. Adulterant in 4 samples, ground olive stones 10 per cent.; 3 samples, ground olive stones 4 per cent.		
Jam	6		Jam, genuine 2; adulterated 4. Adulterant, salicylic acid 2·6, 2·5, 1·7, and 1·2 grs. per lb.		Costs; 5s.; Withdrawn; One not proceeded with.

Total Number of Samples analysed during the quarter, 28.

Total Number of Samples adulterated, 13.

WILLIAM THOMSON, Public Analyst.

SALE OF FOOD AND DRUGS ACT, 1875.—Report of the Public Analyst appointed for the Borough of Stockport upon
the Articles analysed by him under the above Act during the Quarter ending the 31st December, 1903.

Articles submitted for Analysis.	No. of Samples.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis; showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	The sum paid in respect of the Analysis.	Observations.
Milk.....	43	All submitted by Sanitary Inspector.	Milk, genuine 38; adulterated 5. Two added water, 4.7, 4.1 per cent.; Three fat removed, 7.0, 6.4, 6.4 per cent. Butter, genuine 15; adulterated 4. One, 100 per cent. margarine; Three, excess water, 20.9, 20.3, 20.1 per cent.	10/6 per sample.	Fines: 10s.; 40s.; 20s.; 20s.; and 1 adjourned.
Butter	19				Fines: 10s.; 2 cases pending; No proceedings in margarine case.
Margarine	1		Margarine		
Jam	6		Jam		
Demerara Sugar ...	12		Demerara Sugar } All genuine.		
Malt Vinegar	4		Malt Vinegar		
Arrowroot	2		Arrowroot		
Ground Ginger	2		Ground Ginger		
Milk of Sulphur.....	2		Milk of Sulphur, genuine 1; adulterated 1. "Flowers of Sulphur" substituted.		No proceedings. Vendors paid costs.

Year 1903.

December Quarter—(Continued).

K

Articles submitted for Analysis.	No. of Samples.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis; showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	The sum paid in respect of the Analysis.	Observations.
Quinine Wine.....	2	All submitted by Sanitary Inspector.	Quinine Wine, both adulterated; 1 deficient in Quinine Hydrochloride 3·3 grains per pint and containing salicylic acid; the other deficient in Quinine Hydrochloride 10 grains per pint.	10/6 per sample.	Both dismissed. Warranty question.
Pepper.....	2		} All genuine.		
Whisky	4				
Bread and Butter ...	3				
Citrate of Magnesia	2				
Tincture of Rhubarb	2				
Prescriptions	2				
Cod Liver Oil.....	2				

Total Number of Samples analysed during the Quarter, 110.

Total Number of Samples adulterated, 12.

WILLIAM THOMSON, Public Analyst.

January 15th, 1904.

Year 1903.

Ice Cream Shops.

There are 52 of these in the Borough, which have been visited periodically during the year, 201 visits in all having been made.

It was found necessary to serve notices for cleansing purposes in four instances, and these were complied with at once.

There are several Italians making this commodity in the town still whose standard of cleanliness leaves much to be desired, although there has been some improvement effected during the year. The special powers obtained under the Corporation Act, 1899, for this purpose have proved extremely useful.

Tuberculosis and Milk.

In nine cases during the year animals have been found in cow houses within the Borough apparently tuberculous and the animals have, in consequence, been slaughtered and their carcasses surrendered. In six cases the udders were found to be badly affected. Instructions for the disinfection of stalls, etc., where the beasts had been kept were the only additional proceedings taken.

Contagious Diseases Animals Act.

One case of anthrax occurring was reported (on a farm within the Borough) to the police, who carry out the provisions of this Act. In this case a cow had been found in a dying condition and sent to the Manchester Abattoirs, where the case was detected to be anthrax.

The place was thoroughly disinfected and cleansed, and the other cattle isolated and kept in quarantine until all danger was over.

The police took proceedings against the farmer for failing to report to them a case of anthrax, and a fine of £5 and costs was imposed.

STOCKPORT CORPORATION ACT, 1899.

Infectious Disease Amongst Milk Sellers, &c.

A copy of the following notice embodying the provisions of Section 73 of the Corporation Act, 1899, was sent out to 45 farmers, etc., whose milk it was feared had been exposed to infection. Extensive inquiries showed that the suspicions were not justified, but in matters of this kind, which so directly threaten the public health, it does not do to wait for a series of cases to occur before precautionary action is taken.

COUNTY BOROUGH OF STOCKPORT.

NOTICE TO DAIRYMEN, COWKEEPERS, OCCUPIERS OF
DAIRIES, PURVEYORS OF MILK, &c.

October 25th, 1902.

Dear Sir,—

I desire to draw your attention to the fact that under the Stockport Corporation Act, 1899, Section 73, it is **compulsory upon you to report to the Medical Officer of Health**, at the Sanitary Office, Great Egerton Street, Heaton Lane, Stockport, any case of the following illnesses occurring amongst persons employed in or in connection with your Dairy, if you supply Milk within the Borough from premises either within or beyond the Borough:—

Scarlet Fever.

Diphtheria.

Typhoid Fever (occasionally known as “Slow” Fever, “Low” Fever, &c.).

Smallpox.

Membranous Croup.

Continued Fever (sometimes known as “Low” Fever, “Slow” Fever, &c.).

Erysipelas.

Puerperal (Child-Bed) Fever.

Typhus Fever.

Cholera.

Any neglect to carry out the above requirements is punishable by a **penalty not exceeding forty shillings.**

In any case of doubt as to the above illnesses, the opinion of a qualified Medical Man should be obtained **WITHOUT DELAY.**

Yours faithfully,

MEREDITH YOUNG, M.D.,

Medical Officer of Health.

Year 1903.

Dairies, Cowsheds, and Milkshops

Order, 1886.

Three additional cow-keepers have been registered by your Committee during the year, and there are at present 53 on the register. The whole of these have been periodically visited, 447 visits in all having been made.

Many minor defects of cowsheds, dairies, &c., have been remedied, including the repair of defective drains, the provision of watering troughs, construction of manure pits, relaying of shippon floors, etc., whilst two entirely new sheds have been built, and in four other cases sheds have been remodelled on lines suggested by the Department.

With one or two exceptions the places are now in fair order, and each beast is provided with the 600 cubic feet of air space which is usually allowed when adequate headroom and other essentials are satisfactory.

The cattle are now better housed, the milk is produced under more sanitary conditions, and therefore less liable to contamination, although some difficulty is still experienced in obtaining a perfectly satisfactory observance of the conditions requisite for the production of a pure and wholesome supply.

The Department has been compelled to complain to farmers from time to time regarding the cleanliness of the cattle, more especially about the flanks which are found to be fouled with dried excreta, which endangers the purity of the milk, and whilst obstinacy exists in some degree regarding what should be the standard of cleanliness (and we have no regulations to enforce the grooming of cattle) we can only hope to gradually educate their minds to a more perfect state.

Seven notices were served during the year for overcrowding, limewashing, and removal of manure, and received ready compliance.

It is a matter for congratulation that the whole of the alterations in connection with cow-houses, etc., have again been carried out without the necessity of issuing legal notices, letters and interviews having had the desired effect.

Advice has been given in a number of cases regarding disinfection, the contamination of watering pits by infected media, etc., and much good has certainly been done.

Your Committee have granted registration certificates to 31 milk purveyors during the year; 52 purveyors have discontinued business, and there remain at present 139 purveyors of milk on the register (exclusive of farmers). To these various premises 580 visits have been made. There is a slight improvement in the standard of cleanliness of milk stores, and the fact that it has only been necessary to serve notices to cleanse in six cases during

the year speaks for itself. On several occasions during the year the Milk Sellers' Association have given assistance, enabling us to trace milk supplied. The following is the copy of a resolution passed during last year by the Association :—"That this Association strongly recommends its members to prohibit smoking by the employees when delivering milk, and requests members to use their influence to stop this most objectionable practice, and also to report to each other anyone smoking whilst supplying milk to customers." Copies of this have been supplied to the members, and are to be found hung in many milk stores.

Slaughter-houses.

There are 48 registered slaughter-houses in the Borough (one having been discontinued and converted to a stable), and one knacker's yard. Twenty-two of the number come under the provisions of the Public Health Acts Amendment Act, 1890, requiring yearly registration, and it will be a matter for congratulation when all can be reduced to the same standard, for there can be no doubt that many of the existing premises are structurally and otherwise unsatisfactory.

During the year 2,219 visits have been made to the various slaughter-houses, a number which speaks volumes for the conscientious execution of duty by your Meat Inspector, W. Butler.

Effectual supervision is rendered almost impossible from the fact that the places are scattered over a large area, and that slaughtering is done at most irregular and untimely periods.

It has been found necessary to serve 12 preliminary notices during the year for cleansing and limewashing, choked drains, provision of garbage receptacles, etc., all of which were complied with.

I beg to again call your Committee's attention to what continues to be the greatest nuisance in connection with these places, namely, the deposition of offal, and suggest for your careful consideration that it would be well worth while arranging for the Cleansing Department to collect the same at a fixed charge. I believe that most of the slaughtering butchers in the town would be entirely in favour of such an arrangement.

There has been a decided increase in the sale of foreign meat during the year, and the good quality of that meat has been well maintained, a condition of things amply proved by the fact that it has only been found necessary to take legal proceedings in one case during the year.

In some 19 cases coming under your Inspector's notice it was found necessary to seize and destroy a number of lungs and livers in consequence of tubercle or distoma hepaticum.

The following cases also came under your Inspector's notice during the year :—

The carcase of a pig with tubercular deposits on the ribs, the whole being surrendered and destroyed.

The carcase of a pig that had been choked, and was discoloured, and the flesh unmarketable—surrendered and destroyed.

The carcase of a calf ; the flesh was wet, badly set, appeared to have suffered from some inflammatory mischief—surrendered and destroyed.

The carcasses of two sheep that had been worried ; flesh of a bad colour and wet, and quite unmarketable—surrendered and destroyed.

The carcase of a cow ; miliary tubercle in both lungs, and the mesenteric lymphatic glands enlarged and caseous—the whole surrendered and destroyed.

The carcase of an old cow quite emaciated ; costal pleura on both sides covered with tuberculous deposits—surrendered and destroyed.

The carcase of a stirk ; flesh wet and flabby and in poor condition—surrendered and destroyed.

The carcase of a young heifer in good condition ; tubercular deposits on peritoneum of right and left hind quarters, lymphatic glands of the chest enlarged and caseous, carcase otherwise healthy—surrendered and destroyed.

The carcase of a cow recently calved, and having been imperfectly bled, probably after death ; flesh was a bad colour and would not set—surrendered and destroyed.

The carcase of a well-nourished cow was found hanging in a butcher's shop. An attempt had been made to strip the costal pleura from the ribs. On cutting into the lymphatic glands of the chest they were found enlarged and caseous. The muscular lymphatic glands in the hindquarters appeared quite normal and healthy, and these were consequently passed, whilst the two forequarters were seized. Your Committee authorised a prosecution, and a conviction followed.

Three casks of foreign tripe (which had been sent over packed in preservative) were examined and found to be partially decomposed, and the lot, weighing 5cwts., were surrendered and destroyed.

The various butchers, fishmongers, and fruiterers', etc., shops have been regularly visited during the year, and only in the case referred to has it been found necessary to take proceedings. The same remark regarding the removal of offal that applies in the case of slaughter-houses might here also be repeated.

The Market has been kept under supervision during the year, and several surrenders of rabbits, etc., have been made. One stallholder appeared before your Committee and was cautioned for selling a decomposed fowl.

The following extract from a recent report of the Departmental Committee now inquiring into the relation between human and cattle tuber-

culosis, is of prime interest and importance to those engaged in administering the provisions of the Public Health Acts relating to unsound meat :—

“ We have up to the present made use, in the above inquiry, of more than twenty different “ strains” of tuberculous material of human origin, that is to say, of material taken from more than twenty cases of tuberculous disease in human beings, including sputum from phthisical patients and the diseased parts of the lungs in pulmonary tuberculosis, mesenteric glands in primary abdominal tuberculosis, tuberculous bronchial and cervical glands, and tuberculous joints. We have compared the effects produced by these with the effects produced by several different strains of tuberculous material of bovine origin.

“ In the case of seven of the above strains of human origin, the introduction of the human tuberculous material into cattle gave rise at once to acute tuberculosis, with the development of widespread disease in various organs of the body, such as the lungs, spleen, liver, lymphatic glands, etc. In some instances the disease was of remarkable severity.

“ In the case of the remaining strains, the bovine animal into which the tuberculous material was first introduced was affected to a less extent. The tuberculous disease was either limited to the spot where the material was introduced (this occurred, however, in two instances only, and these at the very beginning of our inquiry), or spread to a variable extent from the seat of inoculation along the lymphatic glands, with, at most, the appearance of a very small amount of tubercle in such organs as the lungs and spleen. Yet tuberculous material taken from the bovine animal thus affected, and introduced successively into other bovine animals, or into guinea-pigs, from which bovine animals were subsequently inoculated, has, up to the present, in the case of five of these remaining strains, ultimately given rise in the bovine animal to general tuberculosis of an intense character ; and we are still carrying out observations in this direction.

“ We have very carefully compared the disease thus set up in the bovine animal by material of human origin with that set up in the bovine animal by material of bovine origin, and its finer histological details, to be identical with the other. We have so far failed to discover any character by which we could distinguish the one from the other ; and our records contain accounts of the post-mortem examinations of bovine animals infected with tuberculous material of human origin, which might be used as typical descriptions of ordinary bovine tuberculosis.

“ We defer to a further report all narration of the details of our experiments. . . .

“ Meanwhile we have thought it our duty to make this short Interim Report, for the reason that the result at which we have arrived, namely, that tubercle of human origin can give rise in the bovine animal to tuberculosis identical with ordinary bovine tuberculosis, seems to us to show quite clearly that **it would be most unwise to frame or modify legislative measures in accordance with the view that human and bovine tubercle bacilli are specifically different from each other, and that the disease caused by the one is a wholly different thing from the disease caused by the other.**”

Refuse Collection and Disposal.

It is believed that there are now **approximately** in the Borough :—

7,800 water-closets.
1,000 waste water-closets.
3,850 privy middens.
6,400 privies.
300 pail closets.
6,000 movable dust bins.
2,000 dry ashpits.

No privies were constructed in connection with new buildings in 1903, and no new privies were constructed in place of old to the knowledge of this Department. About 400 water-closets were constructed in connection with new buildings, and 782 privies were converted to water-closets.

It is most sincerely hoped that the Council will, at an early date, provide a refuse destructor for the town and close once and for all the several "tips" where house and other refuse is now deposited.

I am indebted to the Borough Treasurer for the following statement giving the expenditure of the Cleansing Department for the year ending December 31st, 1903.

NIGHTSOIL DEPARTMENT.

	£	s.	d.
General Maintenance Account (including Capital Charges, £218 16s. 8d.)	8408	11	6
Warth Meadow (including Capital Charges, £104 13s. 1d.)	220	8	6
Less Income	252	19	6
	32	11	0 Cr.
Whitehill (including Capital Charges, £100 14s. 5d)	414	2	3

DAY DEPARTMENT.

General Maintenance Account (including Capital Charges, £109 8s. 4d.)	5081	16	6
	£	s.	d.
Nett Expenditure—Nightsoil Department...	8229	6	3
„ „ Day Department.....	5081	16	6

Inspection of Water Closets and Sanitary Conveniences.

In the Borough of Stockport there are at present about 7,800 water-closets, in addition to about 1,000 waste water-closets, and a small number of

latrines of various types. During the year about 15,000 visits and inspections have been made by the Special Inspector appointed by your Committee (Ashton), some property being visited weekly and some closets where defects or improper usage were discovered being visited two or three times a week.

In the following table will be found the chief causes of trouble in connection with water-closets. The defects discovered in connection with balltaps and cistern valves are greatly in excess of last year's record, but this is only what was to be expected seeing that there is an increase of about 1,500 water-closets. The greatest defect, and one giving rise to a serious waste of water, is found to be in connection with the cistern valves, and the chief cause of this defect is the insecure fixing of cistern bearers, or the fixing of such things as cantilever bearers in walls ; by fixing wooden bearers cross-ways from wall to wall much greater firmness could be secured.

There has also been an increase in the number of cheap and defective rubber cones discovered.

LIST SHEWING NATURE OF DEFECTS DISCOVERED IN CONNECTION WITH WATER-CLOSETS.

	District.				Totals	Total in 1902
	No. 1	No. 2	No. 3	No. 4		
Balltaps defective	125	116	181	138	560	472
Cistern Valves defective	67	80	92	63	302	170
Dirtiness and Blockage.....	28	20	61	36	145	179
Water Pipes defective	10	4	16	12	42	110
Basin badly fixed	1	1	11	...	13	5
Indiarubber Cones	8	...	16	5	29	11
Drainage defective	9	3	29	21	62	76

The table shows that, despite the greater number of water-closets in the town, and the greater number of visits of inspection paid, the number of defects discovered is smaller than that recorded for 1902.

Black Smoke.

During the year 265 observations of smoke have been taken. Notices to abate the smoke nuisance were served in 16 cases, and in seven cases no

action was taken, a satisfactory excuse being given. Observations were again taken after the time allowed in the notices (28 days), and it was found that three again exceeded the time limit. These cases were taken before the magistrates; two were ordered to pay the costs, and orders to abate the nuisance within three months were made, whilst in the third case a fine of £5 and costs was imposed.

All the above 23 mills were visited at various times to see what alterations, if any, had been made to abate the nuisance. In three cases the whole of the old boilers (15 in number) were taken out, and nine new high pressure boilers put in; one had a new chimney 300 feet high built; in two cases one extra boiler was provided; in 16 cases apparatus of various kinds was fixed; in the remaining cases the owners changed their coal and gave instructions to their firemen to be more careful.

The following smoke-consuming appliances are amongst the most common in use in this Borough:—

Hollingdrake's Hollow Bar.
Needham's Patent Fire Bar.
Swindells' Air Bar.
Cadie's Hollow Bar.
Green's Economisers.
Procter's Mechanical Stokers.
Spider Draught.
Davidson Sirocco Fan.
McConnell's Automatic Air Regulator.
Binnie's Mechanical Stoker.

LIST OF SMOKE OBSERVATIONS TAKEN DURING THE YEAR 1903.

No.	B.	M.	No.	B.	M.	No.	B.	M.
1	...	65	15	...	63	29	...	53
2	1	53	16	...	48	30	...	44
3	...	40	17	2	48	31	5½	74½
4	...	50	18	...	62	32	9	69
5	2	62	19	1	59	33	3	47
6	1	59	20	...	58	34	4	45
7	...	38	21	2	62	35	2	48
8	2½	48½	22	..	48	36	3	57
9	...	34	23	...	63	37	2	76
10	4	66	24	2	55½	38	...	50
11	...	40	25	14	62½	39	...	76
12	...	47	26	...	44½	40	3	70
13	...	53	27	2	48	41	...	55
14	1	49	28	...	46	42	1	40

No.	B.	M.	No.	B.	M.	No.	B.	M.
43	17 $\frac{1}{2}$	102 $\frac{1}{2}$	90	...	62	137	2	57
44	24	50	91	...	79	138	...	50
45	23	82	92	...	63	139	2	76
46	...	35 $\frac{1}{2}$	93	2	44	140	2	78
47	2	58 $\frac{1}{2}$	94	3	73	141	1	81
48	9	51	95	...	63	142	1	69
49	...	34	96	...	48	143	.	48
50	...	43	97	...	40	144	...	56
51	...	42	98	...	50	145	...	37
52	...	41	99	1	56	146	2	63
53	1	54	100	3	54	147	1	56 $\frac{1}{2}$
54	...	45	101	...	63	148	32	63
55	2 $\frac{1}{2}$	61 $\frac{1}{2}$	102	...	54	149	17 $\frac{1}{2}$	51 $\frac{1}{2}$
56	2	50	103	...	47	150	..	27
57	...	43	104	...	67	151	...	38
58	2	41	105	1	118	152	1	36
59	2	78	106	2	98	153	3	51
60	1	81	107	...	13	154	...	71
61	2	68	108	...	40	155	...	53
62	1	72	109	...	43	156	...	47
63	...	43	110	...	53	157	...	67
64	...	43	111	...	20	158	2	48
65	11 $\frac{1}{2}$	73 $\frac{1}{2}$	112	1	36	159	..	63
66	...	33	113	20	72	160	3	77
67	...	42	114	20	72	161	2	56
68	...	51	115	3 $\frac{1}{2}$	49 $\frac{1}{2}$	162	...	43
69	...	66	116	...	36	163	...	27
70	...	27	117	2	38	164	$\frac{1}{2}$	57 $\frac{1}{2}$
71	...	57	118	12	71	165	...	30
72	3	54	119	...	66	166	1	72 $\frac{1}{2}$
73	...	41	120	31 $\frac{1}{2}$	30 $\frac{1}{2}$	167	12	53 $\frac{1}{2}$
74	...	47	121	...	28	168	1	83
75	...	48	122	1 $\frac{1}{2}$	24 $\frac{1}{2}$	169	3	66
76	1	53	123	5	64	170	2	81
77	3	54	124	2	68	171	...	66
78	...	57	125	29	45	172	3	65
79	1	42	126	1	36	173	...	56
80	3	43	127	3	51	174	...	76
81	...	67	128	...	47	175	...	36
82	...	71	129	...	67	176	1	16
83	2	86	130	...	38	177	...	64
84	...	46	131	1	45	178	...	40
85	...	72	132	...	43	179	...	33
86	1	67	133	...	57	180	...	46
87	12	65	134	3	67	181	1	69
88	15	76	135	...	73	182	2	70
89	13	76	136	...	48	183	...	38

No.	B.	M.	No.	B.	M.	No.	B.	M.
184	...	73	212	2	48	240	...	46
185	2	68	213	1	45	241	3½	93½
186	...	53	214	1	72½	242	...	46
187	...	27	215	...	64	243	...	87
188	...	72	216	...	56½	244	...	58
189	...	37	217	...	46	245	...	73
190	26½	76½	218	3½	76½	246	...	50
191	...	25	219	1	102	247	3	33½
192	3½	93½	220	2	98	248	...	33
193	...	46	221	1	78	249	...	72
194	4½	81½	222	...	80	250	1	52
195	...	68	223	...	52	251	...	28
196	...	65	224	1	73	252	...	57
197	...	45	225	...	69½	253	1	69
198	...	43	226	...	28	254	...	73
199	...	57	227	...	62	255	2	65
200	2	50	228	12	71	256	2	80
201	1	68	229	...	66	257	3	76
202	...	78	230	...	42	258	1	53
203	...	70	231	...	120	259	3	33½
204	1	79	232	4	50	260	29	71
205	...	50	233	...	35	261	...	48
206	3½	66½	234	...	29	262	2	68
207	..	61	235	1	53	263	3	57
208	...	90	236	...	29	264	24	69
209	...	85	237	...	39	265	...	47
210	2	58	238	...	35			
211	1	50	239	...	42			

Four observations were taken of smoke emitted from the chimney of Wilmslow Waterworks on four different days.

Also six observations were taken on Sundays of smoke emitted from the chimney of the Corporation Electrical Works, Millgate.

Offensive Trades.

There are 34 places coming under this description in the Borough which have all been regularly visited, 975 visits in all having been paid by Inspector Billingham. The places have been found clean and satisfactory. Your Medical Officer of Health has visited a number of the premises which called for special attention or where structural alterations were required. The offensive trades registered in the Borough are as under :—

Tripe Boilers	23
Oil Refiners	2
Tallow Melters	1
Tanners	2
Leather Dressers.....	3
Soap Maker	1
Birdlime Makers.....	2

Common Lodging-houses.

There are 18 registered common lodging-houses in the Borough, to which 1,153 ordinary day visits were made by Inspector Billingham, exclusive of special visits in connection with smallpox. The licences of four houses have been cancelled on account of the unsuitability of the premises ; and one other has been closed voluntarily. In general these houses have been well kept, and no single prosecution has been necessary, though your Medical Officer of Health has found it necessary to issue cautionary notices at times for slight breaches of the bye laws.

REGISTERED COMMON LODGING-HOUSES.

	Address.	Registered No. of Lodgers.	No. of Rooms	Average capacity of rooms per person.
1	29, Daw Bank (Baguley)	6	2	462
2	Adlington Square (Kershaw)	61	5	408
3	15, Watson Square (Fitzpatrick)...	19	8	470
4	1 & 3, Bamford Street (Mottram) ...	11	3	417
5	Bamford Street (Spilsbury)	17	5	439
6	Union Street (Marland)	115	6	406
7	Higher Hillgate (Gough)	64	13	410
8	Canal Street (Molyneux)	85	5	411
9	Ridgway Lane (Young)	55	5	406
10	15, 17 & 19, Canal Street (Barratt)	36	9	396
11	19, Garnett Street (Sullivan).....	12	3	396
12	3, Adlington Square (O'Gara)	11	5	400
13	24, Chestergate (Ronan).....	14	5	400
14	Adlington Square (Brennan)	5½	2	436
15	Adlington Square (Summers)	22	7	462

It will be noted that in every lodging-house a high standard of cubic space per person is ensured. The 300 cubic feet which is usually regarded as the proper thing is, in reality, ridiculously insufficient. There is a probability that by thus maintaining a reasonable sufficiency of free air space we decrease considerably the possibility of transference of infectious disease—a matter of the very highest importance when one considers, for example, the callous manner and the contempt with which the average tramp regards smallpox.

Hundreds of special night visits were made to the whole of the common lodging houses in the town by your Medical Officer and Inspectors, in particular by Inspectors Billingham and Ashton.

Midwives Act, 1902.

The specific duties which fall upon the Sanitary Committee, as representing the Town Council, are shown in the following section of the Act :—

8. Every Council of a County or County Borough throughout England and Wales shall, on the commencement of this Act, be the Local Supervising Authority over midwives within the area of the said County or County Borough. It shall be the duty of the Local Supervising Authority—

- (1) To exercise general supervision over all midwives practising within their area in accordance with the rules to be laid down under this Act.
- (2) To investigate charges of malpractice, negligence, or misconduct on the part of any midwife practising within their area, and should a *prima facie* case be established, to report the same to the Central Midwives Board.
- (3) To suspend any midwife from practice in accordance with the rules under this Act, if such suspension appears necessary, in order to prevent the spread of infection.
- (4) To report at once to the said Board the name of any midwife practising in their area convicted of an offence.
- (5) During the month of January of each year to supply the Secretary of the Central Midwives Board with the names and addresses of all midwives who, during the preceding year, have notified their intention to practice within their area, and to keep a current copy of the roll of midwives, accessible at all reasonable times for public inspection.
- (6) To report at once to the Central Midwives Board the death of any midwife or any change in the name or address of any midwife in their areas, so that the necessary alteration may be made in the roll.

- (7) To give due notice of the effect of the Act, so far as practicable, to persons at present using the title of midwife.

Under Section 10 of the Act, every woman certified under this Act must give notice to the local supervising authority of her intention to practice, and renew that notice in the month of January in every year.

It is the business of the secretary appointed by the Central Midwives Board to keep a roll of midwives, containing the names of (a) all midwives already holding certificates from the various qualifying bodies, and (b) the names of all other midwives who have been certified under this Act.

For some years now it has been my practice to keep a list of all midwives who came to the knowledge of the Department in connection with cases of puerperal fever and in other ways. This formed an excellent starting point for the somewhat difficult work imposed upon the Department by the Act of 1902. It has been necessary, however, to augment this list and to obtain the names, addresses, and qualifications of all midwives practising in the Borough. I am indebted to the medical men and others for supplying the names of those who came within their ken. At present we have the names, etc., of 93 women practising as midwives in the town, and by public advertisement we are seeking to make our register quite complete. The drafting of notices, forms of application for registration, &c., and the interviewing of persons who desired information as to the application of the Act, has involved a considerable amount of work, and the proper supervision of the persons engaged in this craft promises to be full of serious responsibility.

The Isolation Hospitals.

I.—DIALSTONE LANE

Occupies an area of 3 acres 1 rood at the junction of Dialstone and Cherry Tree Lanes. The subsoil is yellow boulder clay.

Cost :—

	£	s.	d.
Cost of Buildings	7079	13	4
Cost of Site	1346	14	0
Cost of Furnishing.....	1822	3	1 to Dec. 31st, 1903

The hospital was opened for the reception of patients in 1881.

The following tables contain a statement of the work done by this hospital since 1888.

CASES TREATED FROM 1888 TO 1903 INCLUSIVE, IN THE TWO HOSPITALS.

	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903
Smallpox	98	0	1	0	6	22	26	2	1	0	0	0	6	1	57	89
Scarlet Fever ...	35	36	91	32	26	127	151	112	265	279	115	46	216	403	318	371
Typhus	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Enteric	12	14	22	15	16	85	21	40	38	47	58	27	64	38	18	1
Diphtheria	0	0	2	1	2	9	2	0	1	0	0	2	1	1	2	2
Other Diseases	1	16	4	0	0	1	0	0	1	0	0	1	6	1	0	1
Totals ...	149	66	120	48	51	244	200	154	306	326	173	76	293	444	395	464

PAYMENTS BY PATIENTS.

	£	s.	d.		£	s.	d.		£	s.	d.
1888	108	4	6	1894	150	9	10	1900	1474	14	6
1889	591	10	9	1895	176	15	4	1901	629	0	2
1890	122	14	6	1896	191	8	11	1902	272	18	0
1891	25	7	0	1897	319	11	3	1903	915	5	5
1892	150	18	6	1898	264	14	1				
1893	122	12	0	1899	362	15	0				

Total in 16 years—£5,878 19s. 9d.

NETT COST OF MAINTENANCE.

	£	s.	d.		£	s.	d.		£	s.	d.
1888	715	0	2	1894	1313	12	0	1900	389	5	5
1889	864	13	0	1895	1137	5	11	1901	3113	14	11
1890	606	16	2	1896	1544	11	7	1902	2598	0	4
1891	928	6	2	1897	1592	9	6	1903	3801	6	2
1892	509	19	8	1898	1316	7	8				
1893	1392	8	11	1899	924	5	2				

Year 1903.

The following Tables give the number of cases dealt with by the Hospitals during the past year.

STOCKPORT PATIENTS. (454 CASES AND 21 DEATHS.)

Name of Disease.	In Hospital, 1st Jan., 1903.	Admitted.	Recovered.	Died.	In Hospital, 31st Dec., 1903.
Smallpox 	37	50	45	5	...
Scarlet Fever 	43	322	307	15	30
Typhoid Fever ... ... ... ...	...	1	...	1	...
Continued Fever ... ... ... ...	...	...	...	...	...
Diphtheria ... ... ... ...	...	1	1	...	...
Total.....	80	374	353	21	30

PATIENTS OF OTHER AUTHORITIES. (35 CASES AND 3 DEATHS.)

Year 1903.										
	Smallpox.		Scarlet Fever		Typhoid Fever		Other Diseases.			
	Cases.	Deaths.	Cases	Deaths	Cases	Deaths	Cases	Deaths		
Guardians ...	14	1	11	1	...	...	2	1		
Gorton ...	...	...	6	...	...	...	...	...
Heaton Norris ...	2	...	...	...	...	...	...	...
Total.....	16	1	17	1	...	...	2	1		

NOTE.—The Guardians' Patients are also included in the return of Stockport Patients.

EXPENDITURE ON HOSPITAL ACCOUNT FROM JANUARY

1ST TO DECEMBER 31ST, 1903.

DIALSTONE LANE.

	£	s.	d.
Salaries and Wages	852	2	0
Food, Stimulants, and Drugs	960	0	6
Coke, Coal, Gas, and Water	302	8	4
Rates and Tithe Rent Charge	79	15	1
Repairs	88	3	10
Painting	65	1	8
Dress Material, Drapery, &c.	48	3	3
Deputations' Expenses.....	24	11	4
Medical Assistance (Locum Tenens)	65	14	6
Telephone Rent.....	8	0	0
Stabling and Keep of Horses	69	12	0
Harness Repairs	2	13	1
Premiums on Insurance of Boiler and Disinfector	2	19	6
Soap	5	11	4
Ironmongery	15	18	11
Crockery	9	12	1
Stationery, Printing, Advertising, and Stamps	28	5	1
Petty Cash.....	6	0	0
Cab Hire	18	17	0
Surveyor's Assistants' Wages re Hospital Extension	122	9	3
Shoeing	13	0	4
Rugs, Mats, Baskets, &c.	19	9	9
Sheeting	17	4	0
Horse	40	0	0
Miscellaneous.....	68	4	0

£2933 16 10

Less Amount received for treatment of Outside Patients... 282 19 7

£2650 17 3

WHITEHILL.

	£	s.	d.
Wages	61	9	0
Food, Stimulants, and Drugs	260	17	10
Coke, Coal, Gas, and Water	100	6	8
Rates	25	15	4
Furniture	41	11	3
Plumbing	14	17	4
Telephone Rent.....	14	0	0
Erecting Portable Buildings and Furniture	755	14	6
Drapery, Bedsteads, &c.	181	14	1

	£	s.	d
Fixing up Gas Fires.....	70	1	3
Laying Water Services	35	2	0
Services of Extra Nurses.....	33	12	0
Cutlery and Kitchen Utensils.....	11	15	9
Fire Extinguisher	23	11	10
Repairs	11	9	9
New Lamps	12	12	7
Flour Van	10	0	0
Surveyor's Assistants' Wages	7	8	3
Petty Cash.....	9	3	6
Hip Baths, &c.	12	5	6
Stationery, Printing, &c.	6	11	11
Insurance Premiums	7	13	7
Horse Hire.....	5	5	0
Miscellaneous	11	5	7
Capital Charges	58	10	3
	<hr/>		
	*1782	14	9
Less Amount received for treatment of Outside Patients...	632	5	10
	<hr/>		
	£1150	8	11
	<hr/>		
*£1,177 18s. 3d. for Construction and Furnishing of Portable Buildings.			
Total Nett Expenditure on Hospital Account	£3801	6	2
	<hr/>		

The Isolation Hospitals have both done excellent work during the past year as the tabular statement just given will show.

Your Committee has purchased a plot of land for extension of the Hospital, and has had under consideration a scheme to this end, but the Council were of opinion that it was too expensive and otherwise unsuitable. Your Committee has now the task of preparing a suitable modified scheme of extension, and this is proving by no means easy. It is hoped that in the course of a few months, however, the difficulty will be solved.

Bacteriological Examinations.

Professor Delepine, of the Public Health Laboratory, Manchester, has continued to carry out this work for us, and the assistance thus afforded to the medical profession, and to the two Hospitals, has been most highly valued.

The specimens examined, and the results of the tests, are as under :—

	Positive.	Negative.	Doubtful.
Typhoid	12	12	7
Diphtheria	6	28	5
Phthisis	9	12	—
	<hr/>	<hr/>	<hr/>
	27	52	12

Housing of the Working Classes Act, 1890.

During the year six houses have been condemned by your Medical Officer of Health as being in a state so dangerous and injurious to health as to be unfit for human habitation.

Three of these were closed voluntarily, and in the case of the other three fairly extensive repairs were carried out.

Paving and Sewering, &c.

The Borough Surveyor has kindly supplied me with the following information :—

(1)	Back passages paved and sewered during 1903	524 lin. yds
(2)	Amount of sewerage done in the town (sewage sewers)...	5038 „ „
	(surface water) ...	3068 „ „
(3)	Number of vertical shaft ventilators for sewers erected	Nil.
(4)	„ surface sewer ventilators closed.....	Nil.
(5)	Lineal yards of old sewers taken up and relaid	90
(6)	Number of water-closets erected in connection with new buildings	500
(7)	„ cellar dwellings closed for purposes of street improvements	10

Meteorological Observations.

The Meteorological Station, the instruments in which are the gift of Mr. T. Kay, J.P., of this town, is situated in the centre of the town in the Town's Yard, off St. Petersgate.

The instruments are as follows :—

- (1) Stevenson's Screen, containing
 - (a) Maximum Thermometer } For Shade
 - (b) Minimum Thermometer } Temperatures.
 - (c) Wet and Dry Bulb Hygrometer.

Weekly means of Observations at the Borough Meteorological Observatory, Stockport.

LATITUDE 53° 24' 12" N. LONGITUDE 2° 9' 14" W.

Cistern of Barometer 152 feet and Top of Ringange 185.7 feet above Mean Sea-Level.

1903.	Barometer reduced to Sea-level and 32° F.	Percentage Humidity Sat.: 100	THERMOMETERS.									Average Daily Rainfall.	Average Daily Sunshine
			SHADE				Sun heat.	Solar Radiation	Grass (Min.)	UNDERGROUND			
			Max.	Min.	Range.	Corrected Mean.				1 Foot.	4 Feet		
													Hrs. Min.
1st Week	29.190	80.0	44.3	36.4	7.2	38.793	47.7	62.1	32.4	41.9	46.0	.04	—
2nd „	29.354	85.3	47.8	40.5	9.1	42.682	49.9	58.9	37.9	41.7	45.1	.14	—
3rd „	30.274	88.4	33.7	27.3	6.3	29.616	39.4	56.3	20.3	33.3	44.9	—	0 13
4th „	30.117	92.6	44.0	35.6	6.5	39.464	46.6	57.6	30.0	36.7	43.4	.04	—
5th „	29.958	87.1	49.6	42.6	6.9	45.568	54.7	67.0	37.3	41.3	43.0	.04	—
6th „	30.063	88.4	48.5	38.1	11.1	42.875	53.6	64.4	31.4	41.1	43.3	.02	—
7th „	30.239	90.3	51.0	44.0	6.9	47.089	56.1	72.1	40.0	43.7	44.0	.02	0 39
8th „	30.233	89.3	49.9	41.9	8.0	44.739	55.0	72.4	37.0	43.3	44.3	.08	0 13
9th „	29.516	82.0	47.8	38.5	10.6	41.568	56.4	78.4	33.6	43.0	45.0	.11	1 0
10th „	29.521	84.9	46.8	36.2	10.1	40.539	56.6	76.3	30.9	41.3	44.1	.13	0 47
11th „	29.951	82.4	48.9	39.1	9.8	42.929	60.6	82.6	33.9	41.9	44.0	.08	0 43
12th „	29.726	82.9	50.8	41.4	8.1	45.089	60.3	81.4	36.6	42.4	44.0	.10	0 34
13th „	29.467	82.9	55.6	43.7	13.1	49.089	70.7	92.4	39.1	45.0	44.3	.04	1 2
14th „	29.888	84.0	50.2	39.6	10.6	44.429	62.9	86.7	34.1	44.3	45.0	.09	0 34
15th „	30.024	80.0	52.9	42.7	10.6	46.596	65.9	90.9	37.1	44.9	45.0	.02	1 4
16th „	30.074	65.7	48.6	31.8	17.9	38.093	61.6	93.7	24.9	43.4	45.4	.03	1 51
17th „	29.766	72.4	50.3	33.5	15.1	41.093	65.7	88.4	23.7	42.1	45.0	—	1 47
18th „	29.396	80.1	56.4	44.9	10.8	48.814	72.4	99.6	37.1	45.3	45.0	.14	1 0
19th „	29.467	89.3	53.1	44.3	9.5	46.832	64.6	94.1	37.7	48.1	45.9	.15	0 58
20th „	29.878	77.1	52.9	42.8	9.8	46.971	66.1	91.0	34.4	47.4	46.0	.07	0 32
21st „	30.004	73.0	62.0	46.1	15.7	52.486	79.1	104.4	37.1	48.9	47.0	.02	2 15
22nd „	30.135	65.6	68.4	49.6	17.6	57.764	88.0	114.3	39.0	52.7	47.7	.01	4 43
23rd „	30.165	79.6	67.7	50.3	18.3	56.129	85.4	109.7	41.7	55.3	49.4	—	2 26
24th „	30.040	93.7	63.1	48.9	15.0	53.743	82.7	110.1	41.4	55.4	50.7	.02	2 6
25th „	29.768	89.1	57.8	45.9	12.8	50.282	73.1	102.0	36.9	53.0	51.0	.01	0 51
26th „	30.085	79.0	69.3	50.3	15.2	57.618	84.9	111.3	42.1	54.1	51.4	.08	1 30
27th „	30.079	73.6	69.3	55.3	15.4	60.575	88.3	118.7	47.0	57.9	52.3	.01	3 11
28th „	30.061	78.3	68.1	52.6	15.7	58.825	81.7	107.9	45.7	57.0	53.0	.05	2 21
29th „	29.761	77.0	64.7	54.3	10.3	57.757	80.6	109.3	48.1	58.1	54.0	.10	1 11
30th „	29.857	78.1	67.7	53.6	13.6	58.582	85.3	114.1	47.0	58.1	54.0	.07	1 47
31st „	29.740	89.0	64.0	54.4	10.1	57.054	78.4	107.1	48.3	58.1	55.0	.08	1 39
32nd „	29.866	89.1	65.6	53.3	11.9	58.207	83.3	112.9	46.3	57.7	55.0	.03	2 0
33rd „	29.758	94.0	65.4	53.1	12.9	57.614	82.6	109.9	46.7	57.4	55.0	.10	2 26
34th „	29.636	90.4	62.1	51.7	11.4	54.657	79.7	105.4	46.1	56.1	55.0	.15	2 15
35th „	29.875	90.6	62.3	51.4	10.3	55.907	74.7	104.0	46.0	55.0	55.0	.07	0 51
36th „	29.870	94.1	65.4	53.4	12.2	58.168	79.0	107.3	47.6	55.3	55.0	.12	1 51
37th „	29.798	83.0	58.7	48.3	11.6	52.782	72.6	102.4	43.1	54.4	54.7	.21	2 26
38th „	30.217	87.7	58.7	42.6	14.1	50.064	71.4	98.1	33.6	51.0	54.0	—	1 41
39th „	30.090	92.4	66.7	56.4	10.5	59.779	77.3	100.7	48.7	53.6	53.0	.07	1 30
40th „	29.742	89.9	63.3	53.3	10.1	57.707	72.3	93.9	44.9	55.0	53.9	.09	0 47
41st „	29.588	94.4	56.8	48.3	10.3	51.050	64.1	87.7	42.6	53.6	54.0	.17	0 58
42nd „	29.425	88.7	55.1	45.6	8.9	49.846	62.9	86.3	40.1	51.0	53.0	.16	1 9
43rd „	29.677	90.4	54.2	46.1	8.1	49.164	60.1	77.0	39.7	50.6	52.3	.10	0 17
44th „	29.415	86.4	53.3	45.6	7.8	48.357	60.4	79.9	38.6	49.6	52.0	.16	0 34
45th „	30.324	95.4	51.0	40.2	12.1	43.829	56.7	73.6	32.3	48.1	51.0	.06	0 26
46th „	30.041	97.0	51.8	45.4	6.2	48.421	55.7	67.7	39.9	46.7	50.4	.05	0 17
47th „	29.903	96.0	45.8	34.6	9.8	39.707	49.1	61.1	29.0	45.0	49.9	.05	—
48th „	29.831	97.3	47.6	42.3	6.8	44.518	49.7	61.4	36.4	45.0	49.0	.14	—
49th „	29.519	88.6	39.0	30.4	9.7	33.636	42.0	54.1	22.9	42.4	47.9	.04	—
50th „	29.183	92.6	45.0	36.8	7.5	40.093	46.9	53.1	31.4	41.4	46.7	.06	—
51st „	29.669	90.7	43.2	38.3	4.6	40.818	45.1	52.4	31.7	41.7	46.0	.01	—
52nd „	30.029	91.3	45.2	39.4	5.9	41.779	45.9	51.1	34.1	42.4	46.0	—	—

Weekly means of Observations at the Borough

Latitude 58° 24' 12" N. Longitude 1° 02' 00" W.

Station of Barometer 152 feet and Top of Bunker

1903.	Barometer reduced to sea-level	Barometer at 152 feet	Rainfall in inches	Wind direction	Wind force	Rain fall	Total Rainfall
1st Week	30.130	30.130	80.0	14.3	36.4	7.2	38.703
2nd "	30.324	30.324	82.3	17.8	10.5	3.1	13.623
3rd "	30.374	30.374	88.4	33.7	27.8	6.3	20.610
4th "	30.117	30.117	93.6	41.0	35.6	6.2	20.164
5th "	30.028	30.028	87.1	40.6	45.6	6.0	19.568
6th "	30.063	30.063	84.1	48.2	38.1	11.1	43.872
7th "	30.233	30.233	90.3	51.0	44.0	6.0	17.080
8th "	30.333	30.333	80.3	40.0	41.0	8.0	14.733
9th "	30.510	30.510	83.0	17.8	38.2	10.6	11.668
10th "	30.251	30.251	84.0	16.3	36.5	10.1	10.280
11th "	30.291	30.291	87.4	48.3	20.1	3.2	13.323
12th "	30.720	30.720	87.3	20.2	41.1	8.1	15.080
13th "	30.467	30.467	85.0	27.6	48.7	13.1	19.020
14th "	30.882	30.882	84.0	20.2	30.6	10.6	14.430
15th "	30.024	30.024	80.0	23.0	42.7	10.6	16.936
16th "	30.074	30.074	65.7	42.6	31.2	17.2	28.033
17th "	30.702	30.702	73.4	20.3	33.2	17.2	11.032
18th "	30.306	30.306	80.1	26.4	44.3	10.2	18.414
19th "	30.107	30.107	80.3	44.3	44.3	7.3	18.623
20th "	30.272	30.272	75.1	22.0	42.8	7.2	16.374
21st "	30.001	30.001	75.3	22.0	42.8	7.2	16.374

- (2) Campbell's Sunshine Recorder.
- (3) Five-inch Rain Gauge.
- (4) Black and Bright Bulb Thermometers (for "Radiation" Temperatures).
- (5) Grass Minimum Thermometer.
- (6) One foot and four feet Earth Thermometers.
- (7) Robinson's Anemometer.
- (8) Standard Mercurial Barometer (Kew pattern). This last instrument is fixed in the office of the Medical Officer of Health at a height of 152 feet above mean sea level.

Readings of these instruments are taken at 9 a.m. each day, and are subsequently corrected and recorded in a register kept for that purpose. A tabulated statement of the readings for 1903 is given herewith.

Recommendations in Brief for Future Action.

These are submitted in compliance with the instructions of the Local Government Board as to the preparation of Annual Reports by Medical Officers of Health.

1. That the provision of increased accommodation at the Dialstone Lane Fever Hospital—a matter which has engaged your Sanitary Committee's attention for a considerable time now—be pressed forward with all possible dispatch.

2. That the present system of "tipping" ashpit refuse be discontinued, and that in lieu thereof one or more refuse destructors be erected for the purpose of disposing of such refuse.

3. That a station for the preparation and distribution of sterilised milk be provided (*vide* Dr. Charles Porter's Annual Report for the year 1899).

4. That a School Medical Officer be appointed with duties on some such lines as are sketched out in the Annual Report of your Medical Officer of Health for 1900 (pp. 34 and 35).

5. That a Public Mortuary be provided.

6. That a Steam Disinfector with Bathing Station be provided at Whitehill Hospital. (See my Special Report on Smallpox, 1902 3.)

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